



イブニング
KC 106

もやしもん 1

TALES OF
AGRICULTURE

1

もやしもん

石川雅之

石川雅之

講談社

EVENING KC



TALES OF AGRICULTURE

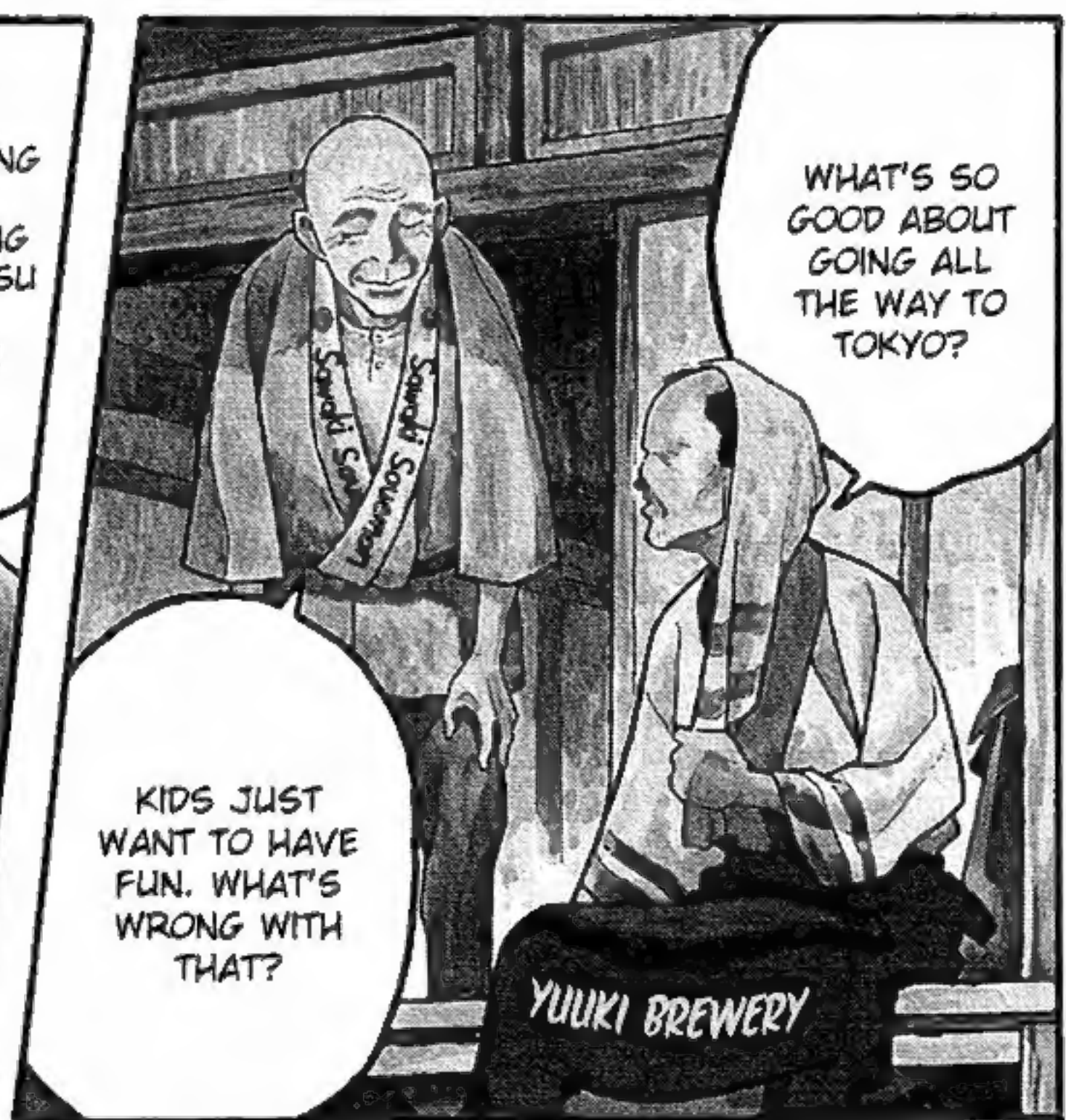
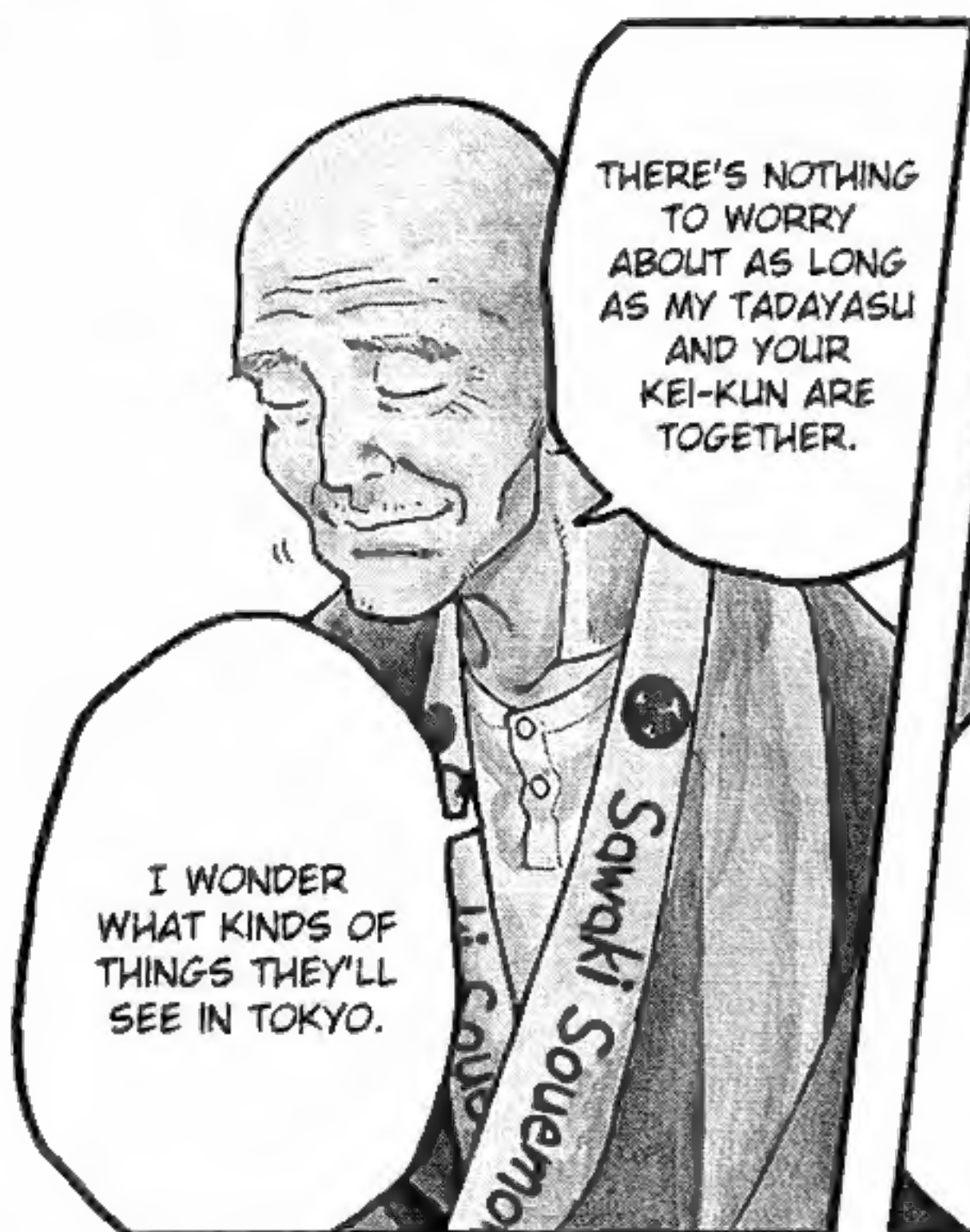
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MASAYUKI ISHIKAWA

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This manga is completely
fiction. Just in case.



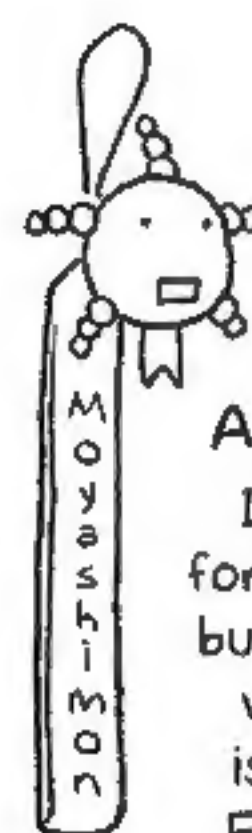
PLAYING WITH
SOMETHING
I CAN'T
SEE IN THE
STOREHOUSE.

BUT WELL...
I'VE
ACTUALLY
SEEN
TADAYASU

CH. 1: ENROLLMENT

農大物語

NOUDAI MONOGATARI



A. strap
I'd love
for them to
bundle this
with an
issue of
Evening.



HE'S BETTER
OFF NOT
SEEING THINGS
OTHERS
CAN'T SEE.

HE'LL
JUST END
UP GETTING
TEASED
FOR IT.



WELL,
HE HASN'T
MENTIONED
IT LATELY,

SO HE MIGHT
HAVE LOST
THE ABILITY TO
SEE THEM.



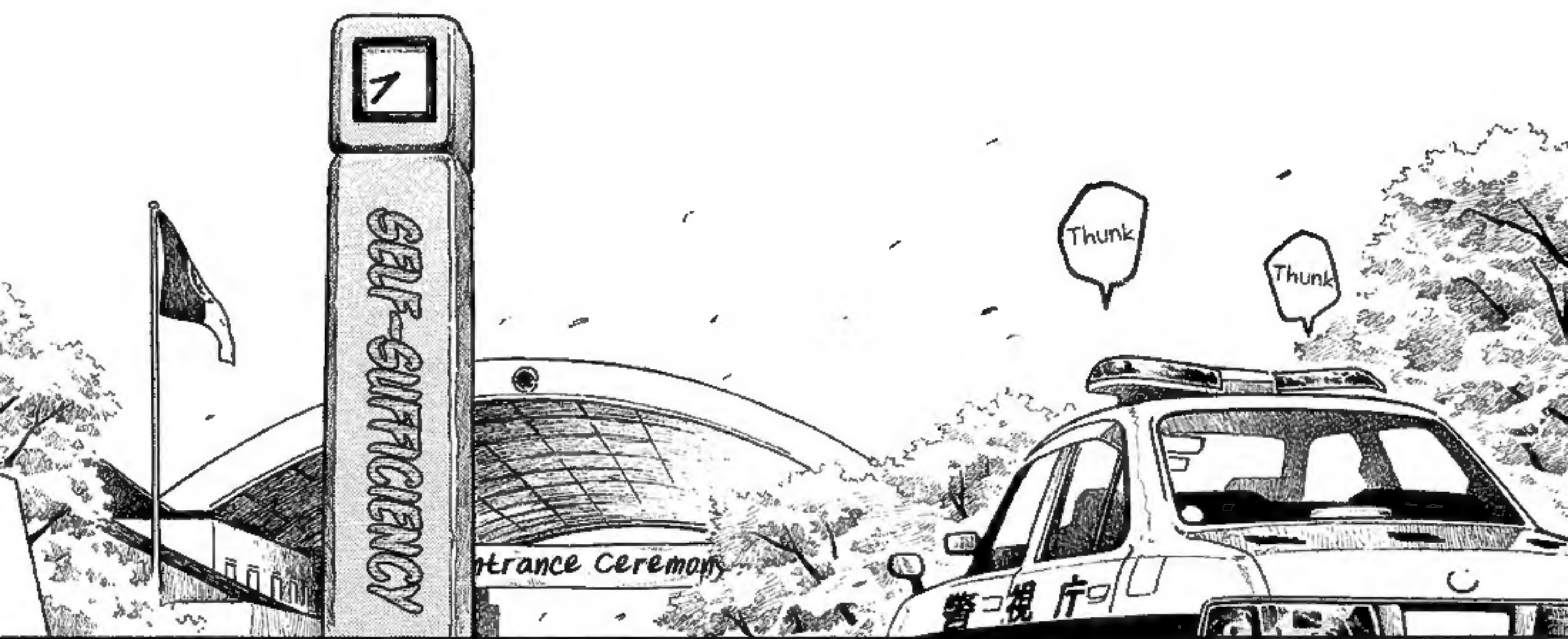
THAT'S
BECAUSE MY
GRANDSON'S A
STAND-UP GUY.

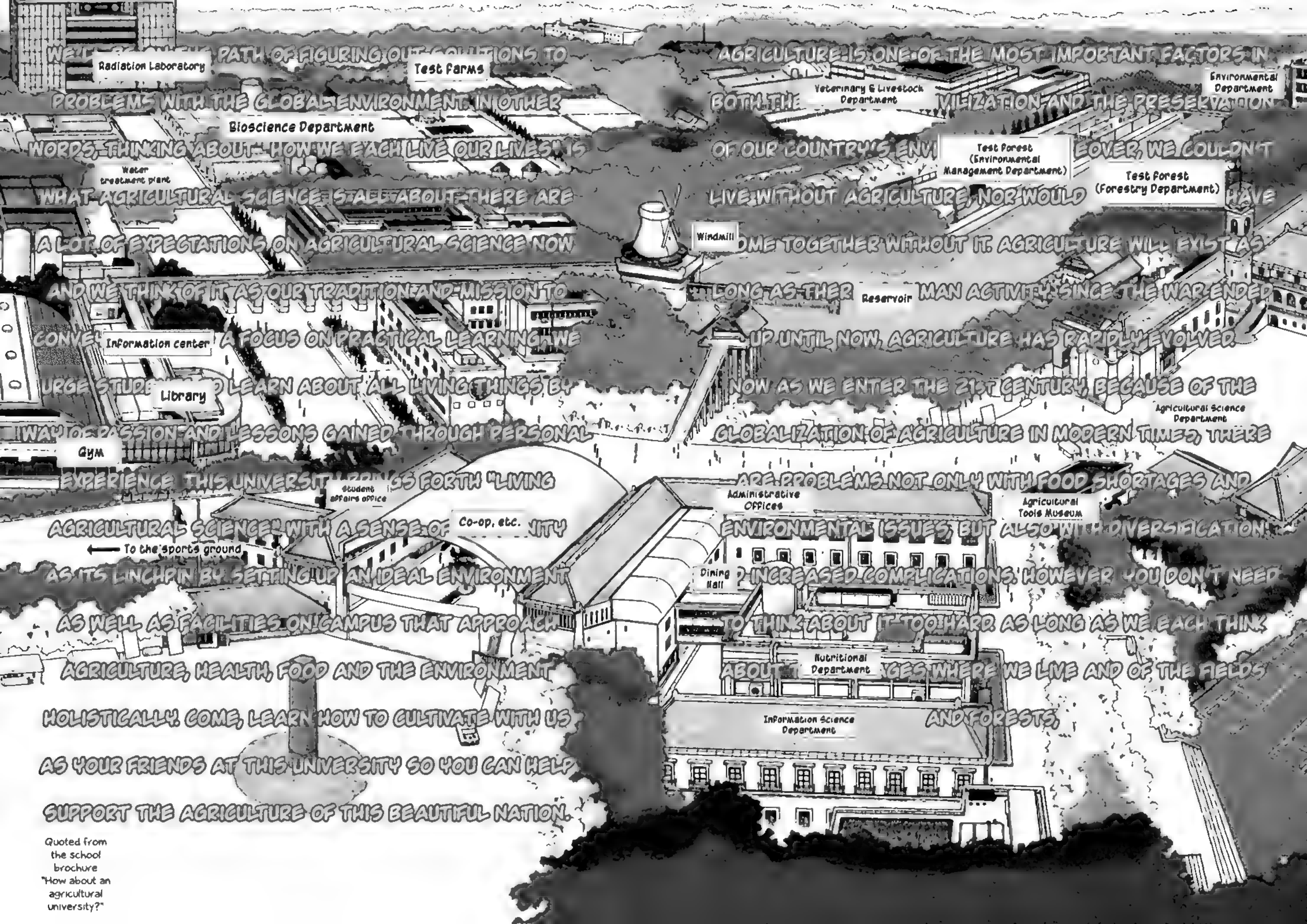
BUT KEI-KUN
DOESN'T TEASE
HIM ABOUT
THAT.



HAHA! IT'S ALL
THANKS TO THEM
THAT I GET TO DRINK
YOUR SAKE SO EARLY
IN THE MORNING,
YUUKI-SAN.

WELL, LET'S
HAVE A DRINK TO
CELEBRATE OUR
GRANDSONS.

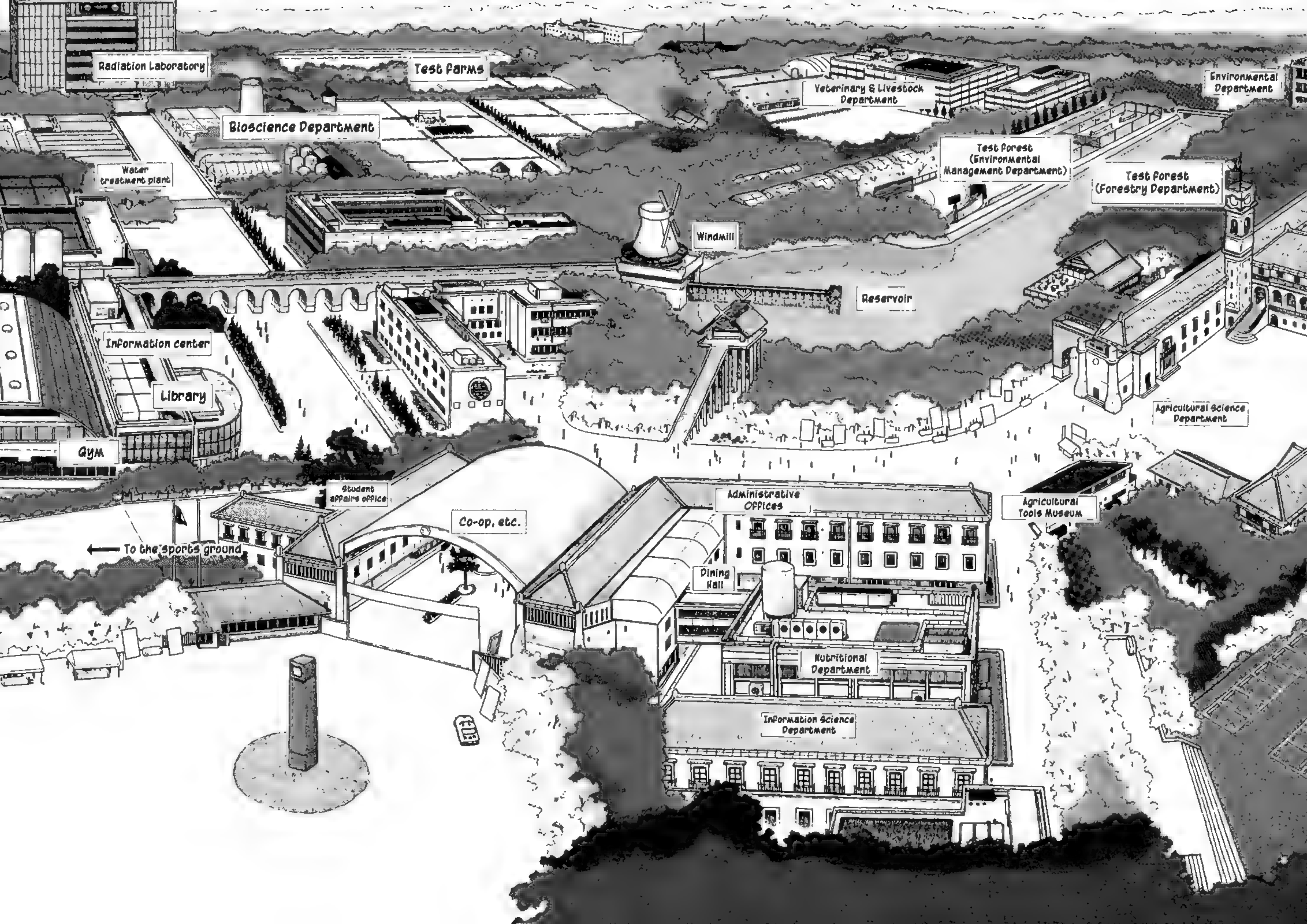




WE'VE BEEN ON THE PATH OF FIGURING OUT SOLUTIONS TO PROBLEMS WITH THE GLOBAL ENVIRONMENT. IN OTHER WORDS, THINKING ABOUT HOW WE EACH LIVE OUR LIVES. IS WHAT AGRICULTURAL SCIENCE IS ALL ABOUT. THERE ARE A LOT OF EXPECTATIONS ON AGRICULTURAL SCIENCE NOW AND WE THINK OF IT AS OUR TRADITION AND MISSION TO CONVEY A FOCUS ON PRACTICAL LEARNING. WE URGE STUDENTS TO LEARN ABOUT ALL LIVING THINGS BY TRYING TO PASSION AND LESSONS GAINED THROUGH PERSONAL EXPERIENCE. THIS UNIVERSITY IS FORTH "LIVING AGRICULTURAL SCIENCE" WITH A SENSE OF COMMUNITY AS ITS LINCHPIN BY SETTING UP AN IDEAL ENVIRONMENT AS WELL AS FACILITIES ON CAMPUS THAT APPROACH AGRICULTURE, HEALTH, FOOD AND THE ENVIRONMENT HOLISTICALLY. COME, LEARN HOW TO CULTIVATE WITH US AS YOUR FRIENDS AT THIS UNIVERSITY SO YOU CAN HELP SUPPORT THE AGRICULTURE OF THIS BEAUTIFUL NATION.

AGRICULTURE IS ONE OF THE MOST IMPORTANT FACTORS IN BOTH THE MODERNIZATION AND THE PRESERVATION OF OUR COUNTRY'S ENVIRONMENT. HOWEVER, WE COULDN'T LIVE WITHOUT AGRICULTURE, NOR WOULD WE COME TOGETHER WITHOUT IT. AGRICULTURE WILL EXIST AS LONG AS THERE IS HUMAN ACTIVITY. SINCE THE WAR ENDED UP UNTIL NOW, AGRICULTURE HAS RAPIDLY EVOLVED. NOW AS WE ENTER THE 21ST CENTURY, BECAUSE OF THE GLOBALIZATION OF AGRICULTURE IN MODERN TIMES, THERE ARE PROBLEMS NOT ONLY WITH FOOD SHORTAGES AND ENVIRONMENTAL ISSUES, BUT ALSO WITH OVERSIFICATION AND INCREASED COMPLICATIONS. HOWEVER YOU DON'T NEED TO THINK ABOUT IT TOO HARD AS LONG AS WE EACH THINK ABOUT THE CHANGES WHERE WE LIVE AND OF THE FIELDS AND FORESTS.

Quoted from the school brochure "How about an agricultural university?"



Radiation Laboratory

Test Farms

Bioscience Department

Water treatment plant

Windmill

Reservoir

Veterinary & Livestock Department

Test Forest (Environmental Management Department)

Test Forest (Forestry Department)

Environmental Department

Information center

Library

Gym

Student affairs office

Co-op, etc.

Administrative Offices

Dining Hall

Nutritional Department

Information Science Department

Agricultural Tools Museum

Agricultural Science Department

To the sports ground



YOU MAY
ALREADY BE
AWARE OF
THIS FROM THE
LEAFLETS THE
POLICE ARE
HANDING OUT
ON CAMPUS,

EXCUSE ME,
I'M FROM
ADMINISTRATIVE
AFFAIRS.



WELL,
WITH SUCH A
LARGE CAMPUS,
SHE COULD
BE BURIED
SOMEWHERE,

IS
THAT
GUY
DRUNK?

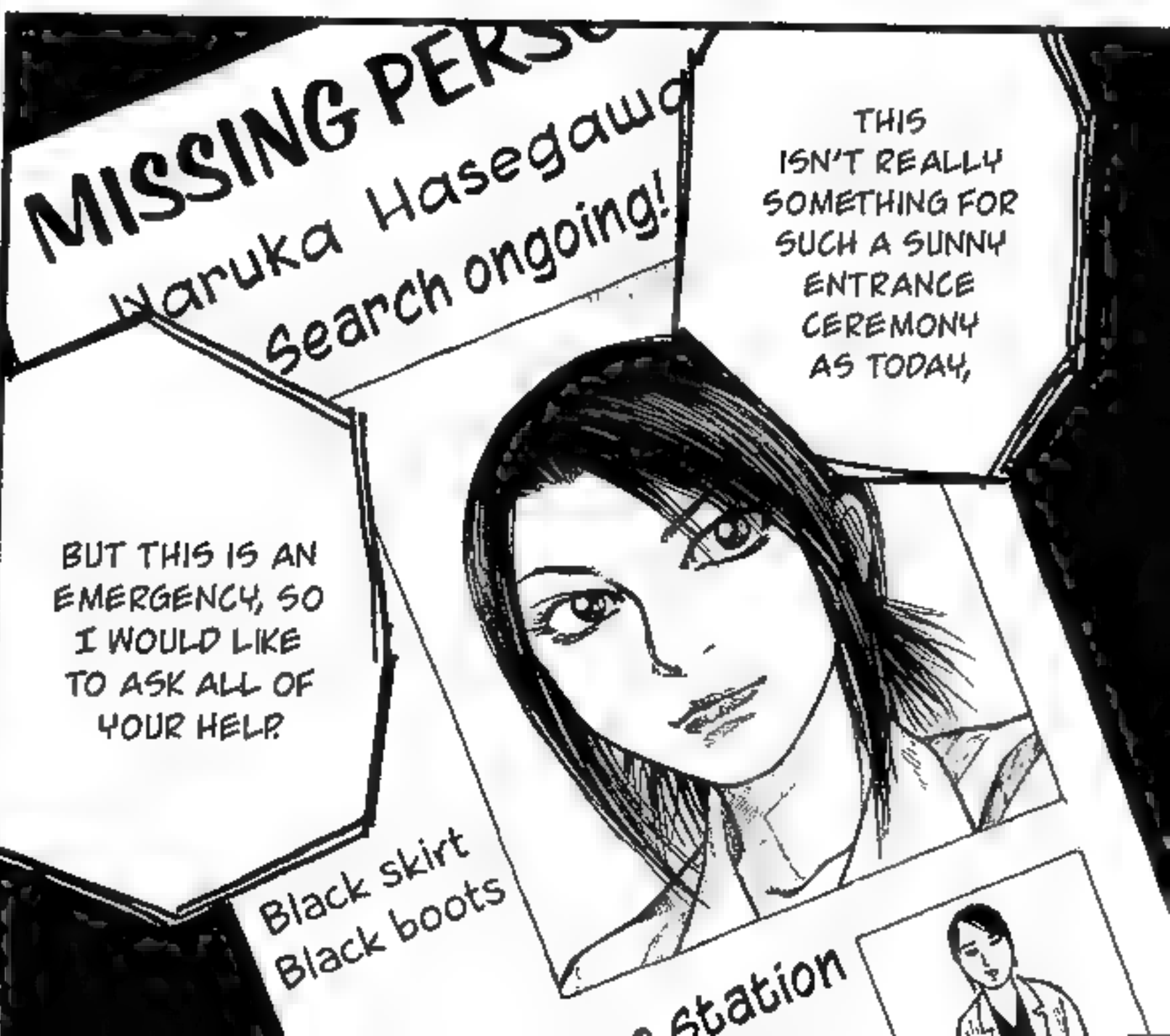
WHAT
AN
IDIOT!

BUT IF YOU FIND
HER, PLEASE
CONTACT THE
POLICE OR THE
ADMINISTRATIVE
OFFICE.



BUT IT SEEMS
THAT ONE OF
OUR GRADUATE
STUDENTS, HARUKA
HASEGAWA-SAN,
HAS BEEN MISSING
FOR THE PAST
MONTH,

AND A
SEARCH FOR
HER HAS
OFFICIALLY
BEGUN TODAY.



MISSING PERSON
Haruka Hasegawa
Search ongoing!

THIS
ISN'T REALLY
SOMETHING FOR
SUCH A SUNNY
ENTRANCE
CEREMONY
AS TODAY,

BUT THIS IS AN
EMERGENCY, SO
I WOULD LIKE
TO ASK ALL OF
YOUR HELP.

Black skirt
Black boots

Station









Rustle

Rustle

Rustle

Rustle

AGRICULTURAL
UNIVERSITIES
DEAL WITH
LIVING THINGS,
SO I DOUBT
YOU CAN PUT A
CLOCK ON THEM.

THEY SEEM
SO BUSY
RIGHT FROM
THE FIRST
DAY OF
SCHOOL.

IS EVERYONE
AT COLLEGE
LIKE THIS?

THIS IS MORE
WHAT YOU'D
SEE AT AN
AGRICULTURAL
UNIVERSITY.

HAZMAT
SUIT
TRAINING
MY ASS.

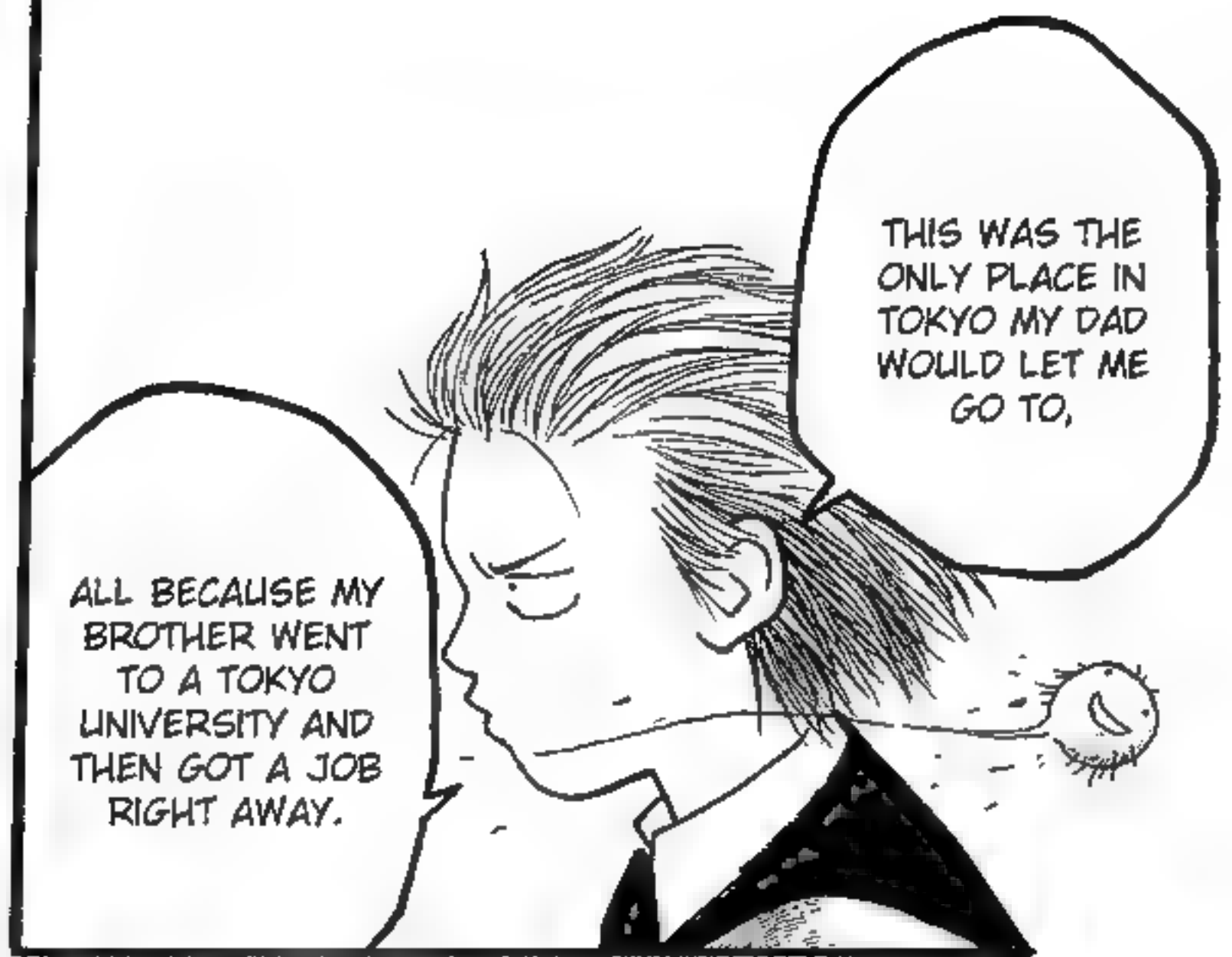
MY
IMPRESSION OF
TOKYO COLLEGES
IS KINDA
CRUMBLING.

BUT I DIDN'T
EXPECT YOU TO
APPLY TO AN
AGRICULTURAL
UNIVERSITY,
SAWAKI.

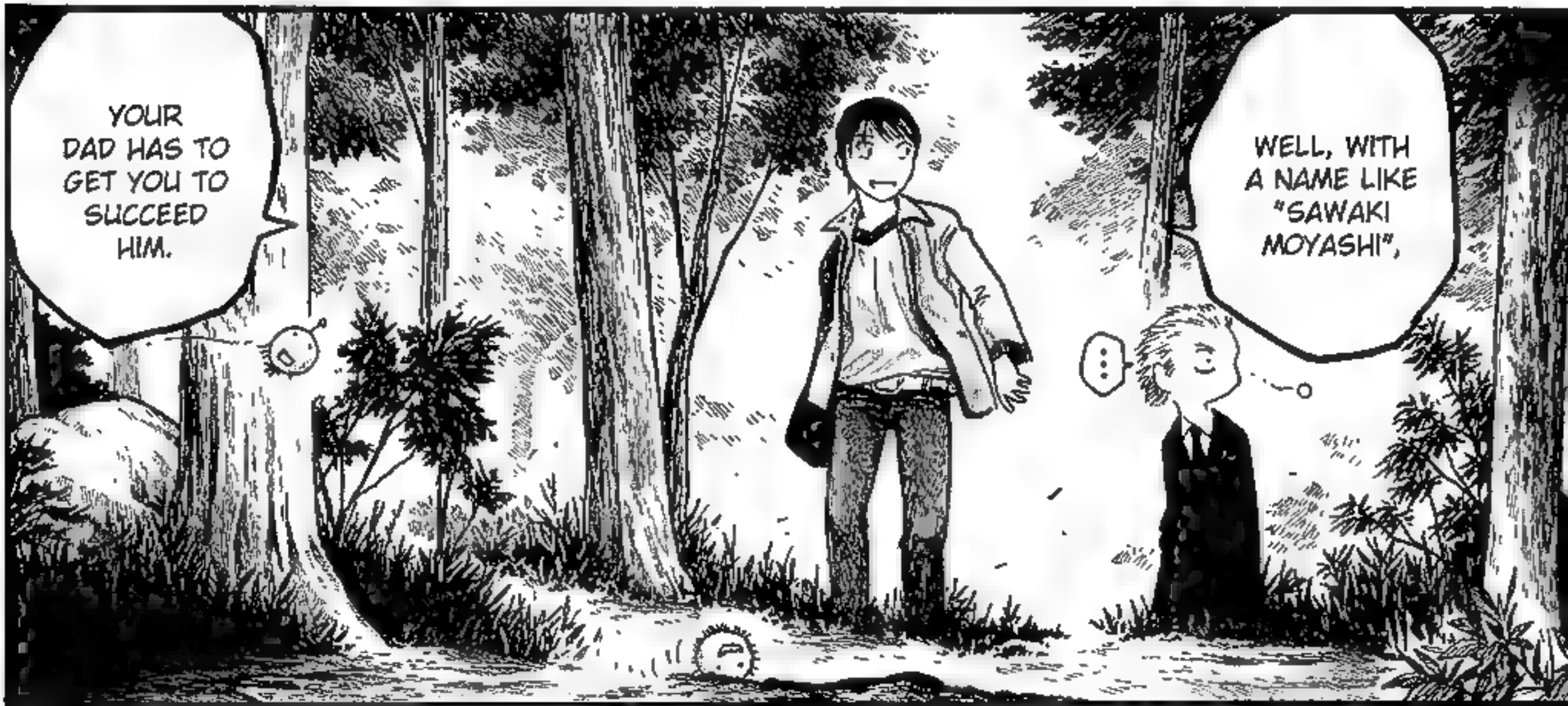
YOU'LL GET
CREDITS FOR
IT, SO JUST
HANG IN
THERE.

BIO HAZARD

注
C A U
BIO HAZARD



※
Moyashi
Koji
mold-
starter
suppliers
are
called
"Moyashi
shops"





IT SEEMS
LIKE...THERE
ARE A LOT OF
MICROBES UP
AHEAD.

A BUNCH OF
THEM HAVE
BEEN DRIFTING
THIS WAY FOR A
LITTLE WHILE.



ARE WE
GOING
DOWN
THAT
WAY?

YEAH, HE
SAID GOING
THROUGH
HERE
WOULD BE A
SHORTCUT.



I SEE...
DID AN
ANIMAL
DIE OR
SOMETHING?

W-WELL,
WHATEVER.
IT DOESN'T
BOTHR ME
THAT MUCH.



YOU HAVEN'T
TALKED ABOUT IT
RECENTLY, SO I
THOUGHT YOU
COULDN'T SEE
THEM ANYMORE.

SORRY!
THEN LET'S
FIND A
DIFFERENT
ROUTE.



BUT NOW
I CAN SEE
A LOT OF
THEM FOR
THE FIRST
TIME IN A
WHILE.

I HAVEN'T
SEEN THEM
AS MUCH AS
I USED TO
WHEN I WAS
A KID...



STILL, THAT
SURE IS A
MYSTERIOUS
ABILITY YOU
HAVE.



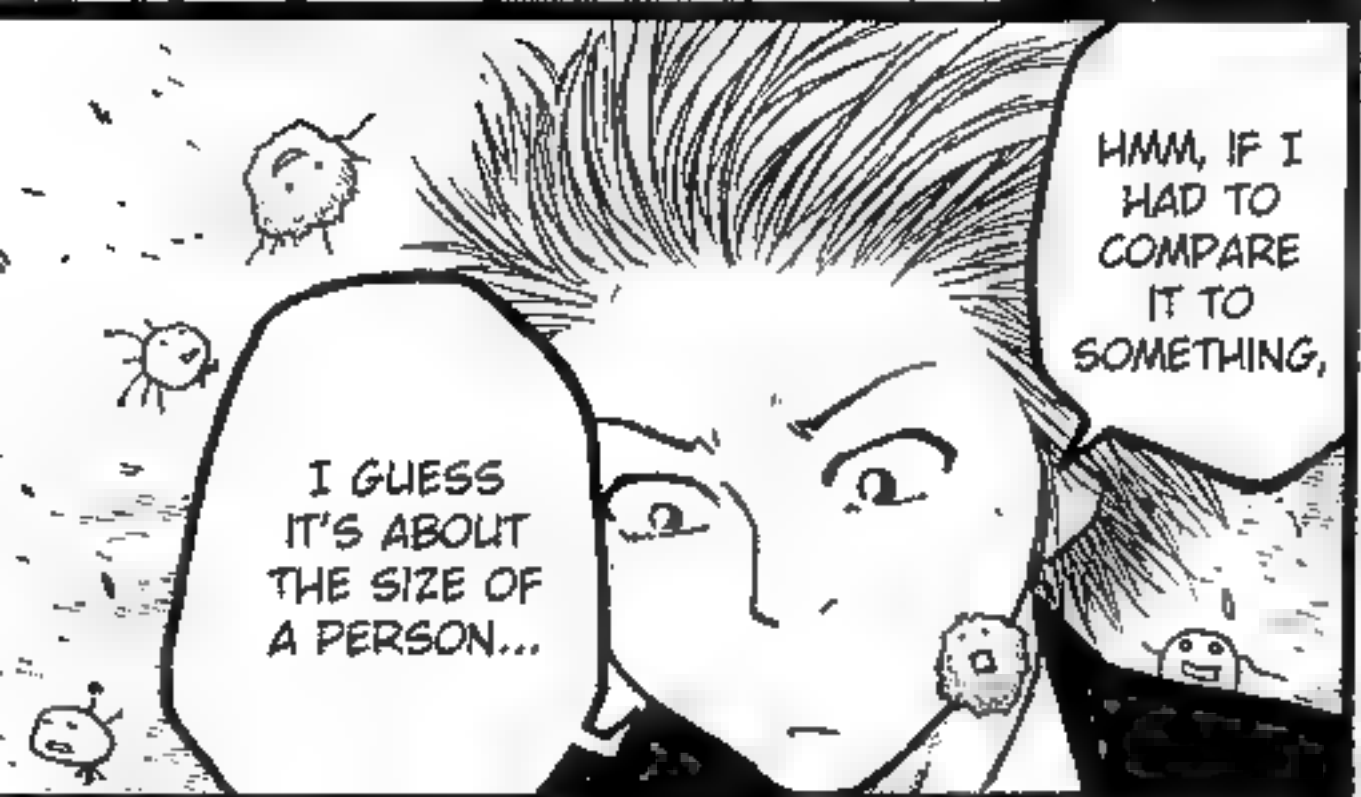
HUH!?
ALL I SEE
IS THE
GROUND.

...SO THAT
MEANS
SOMETHING
IS BURIED.



...SAWAKI?

WH...
WHAT THE
HELL IS
THAT...?



A
PERSON?







WHAT'S WITH
THIS NAME
PLATE? IT'S
ALMOST LIKE
THIS IS A
PET'S
GRAVE!

ALL YOU
STUDENTS
GET
BACK!

HEY!
BRING
SOME
SHOVELS!

A!



HUH
!?

WHAT ABOUT
MICROBES?



I-I DON'T
KNOW
ANYTHING
ABOUT THIS!
I WAS JUST
JOKING...

HEY!
DIDN'T YOU
SAY THAT SHE
WAS BURIED
SOMEWHERE
AT THE
ENTRANCE
CEREMONY?

W

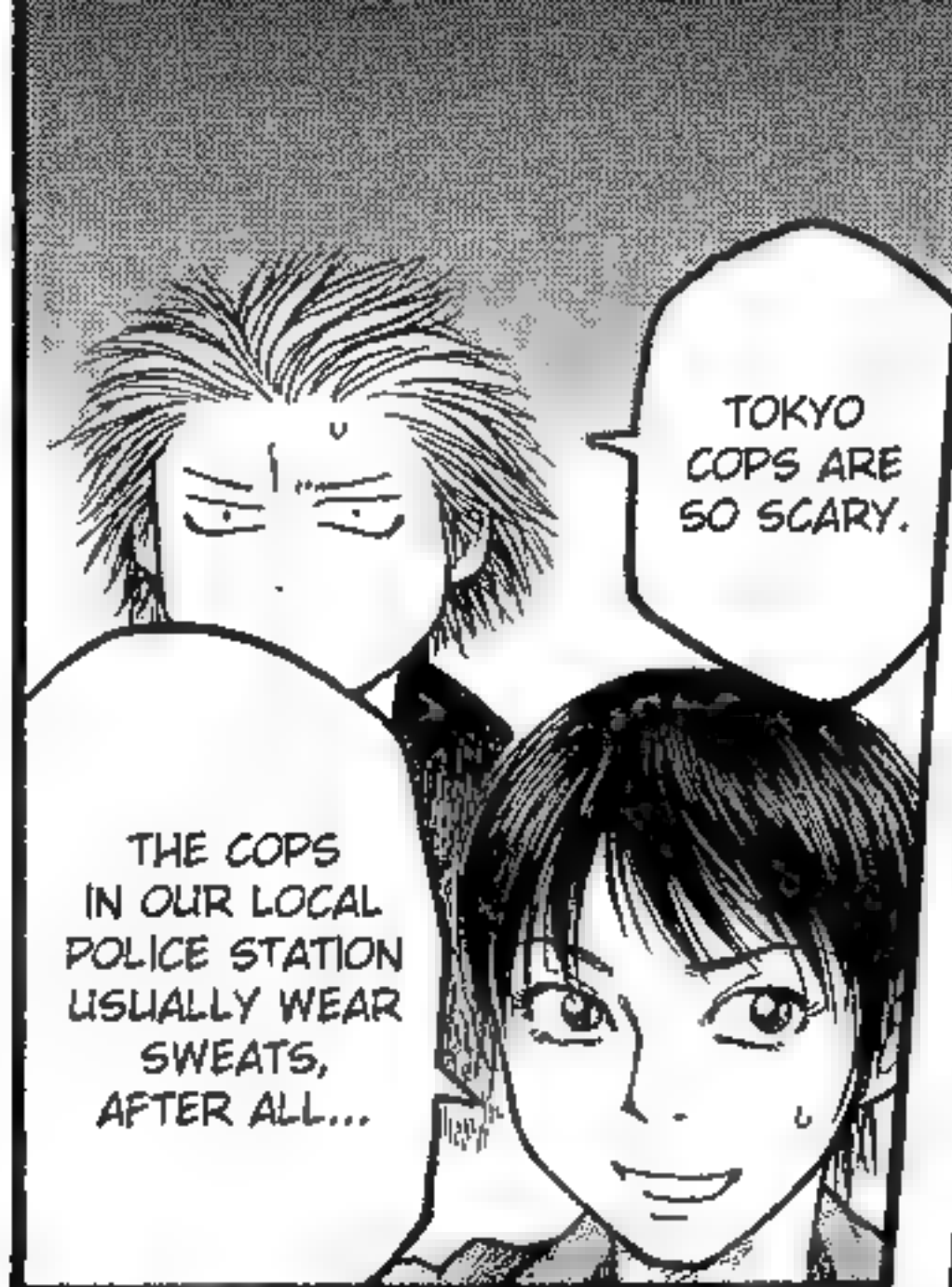
A!

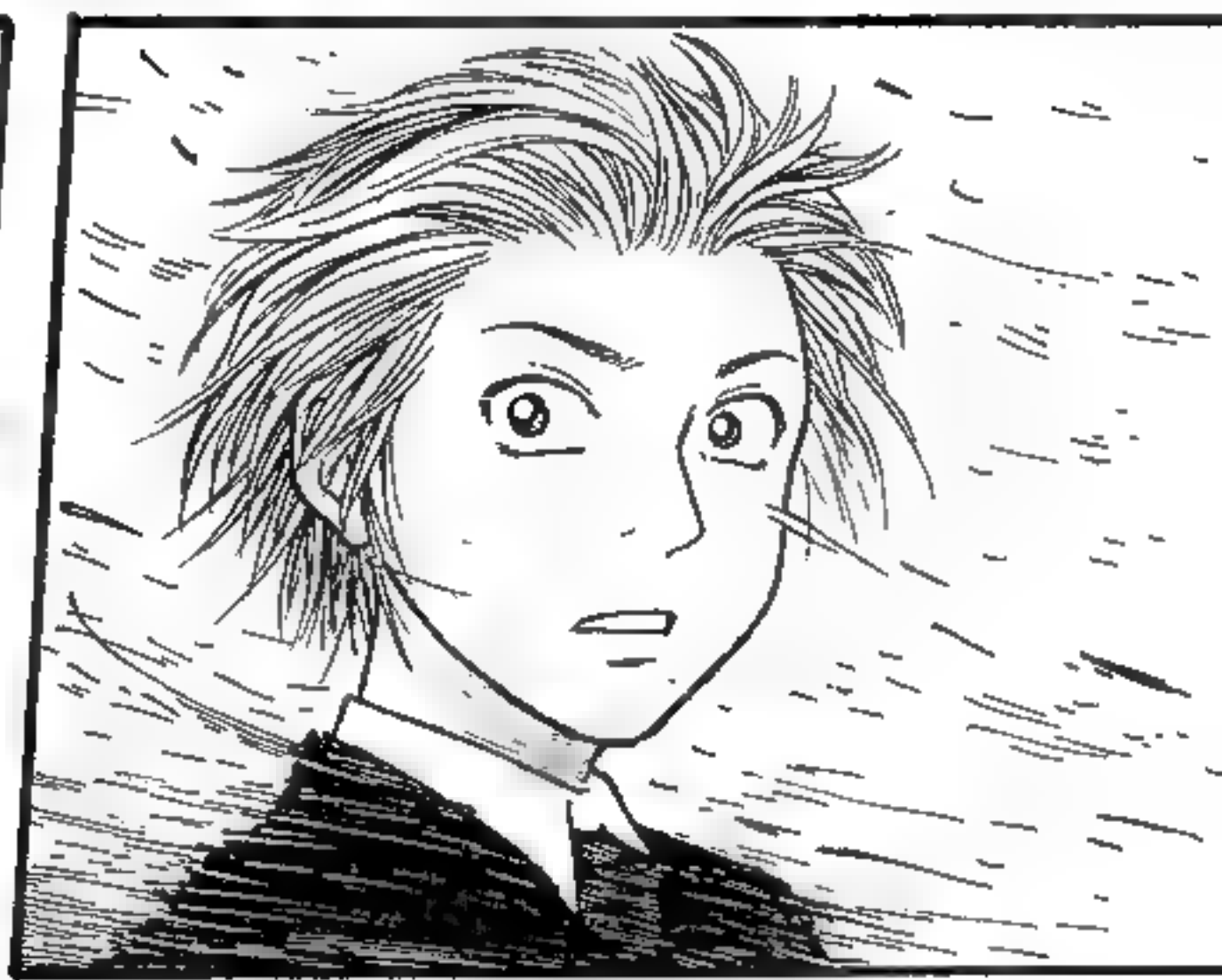
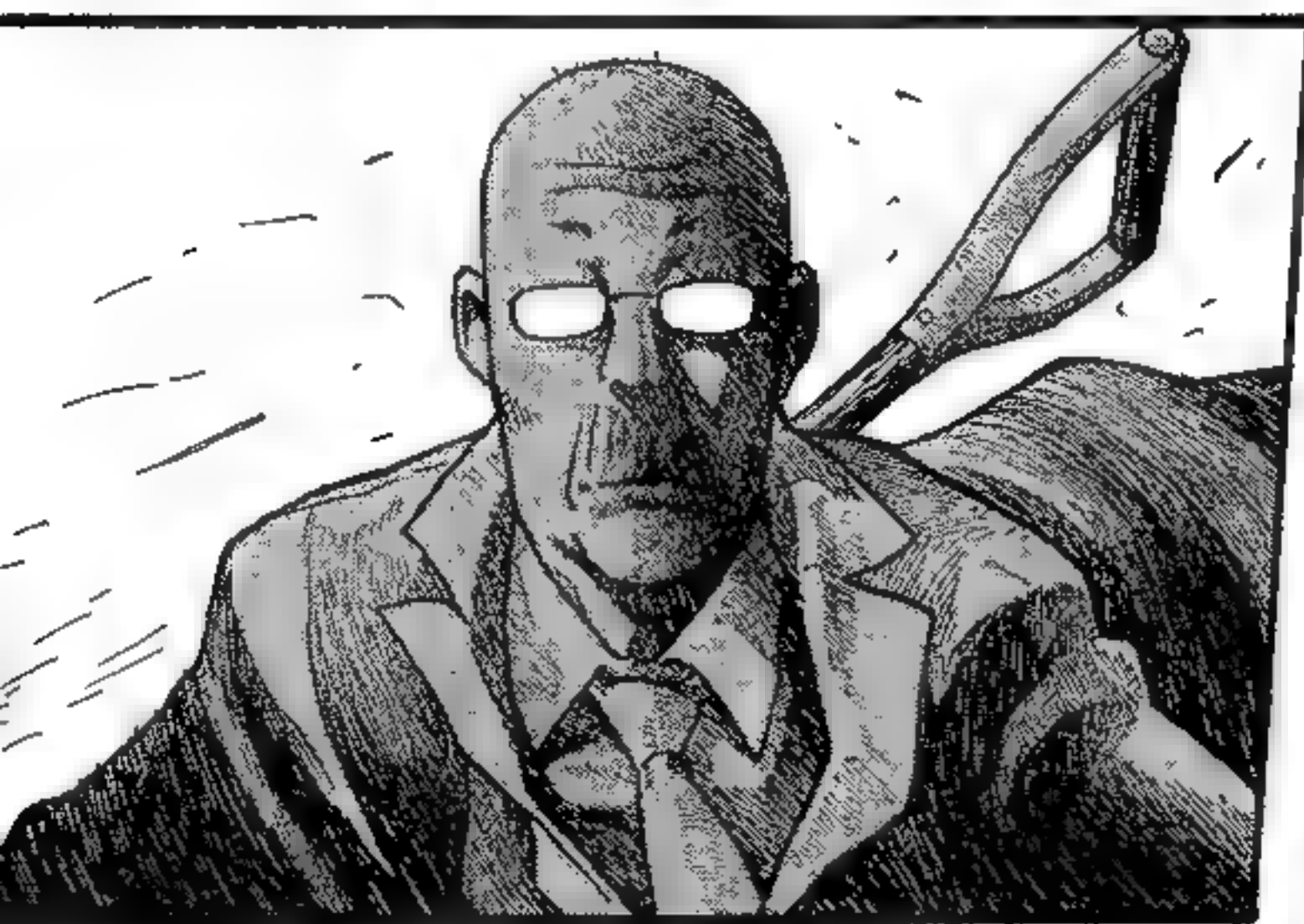
A



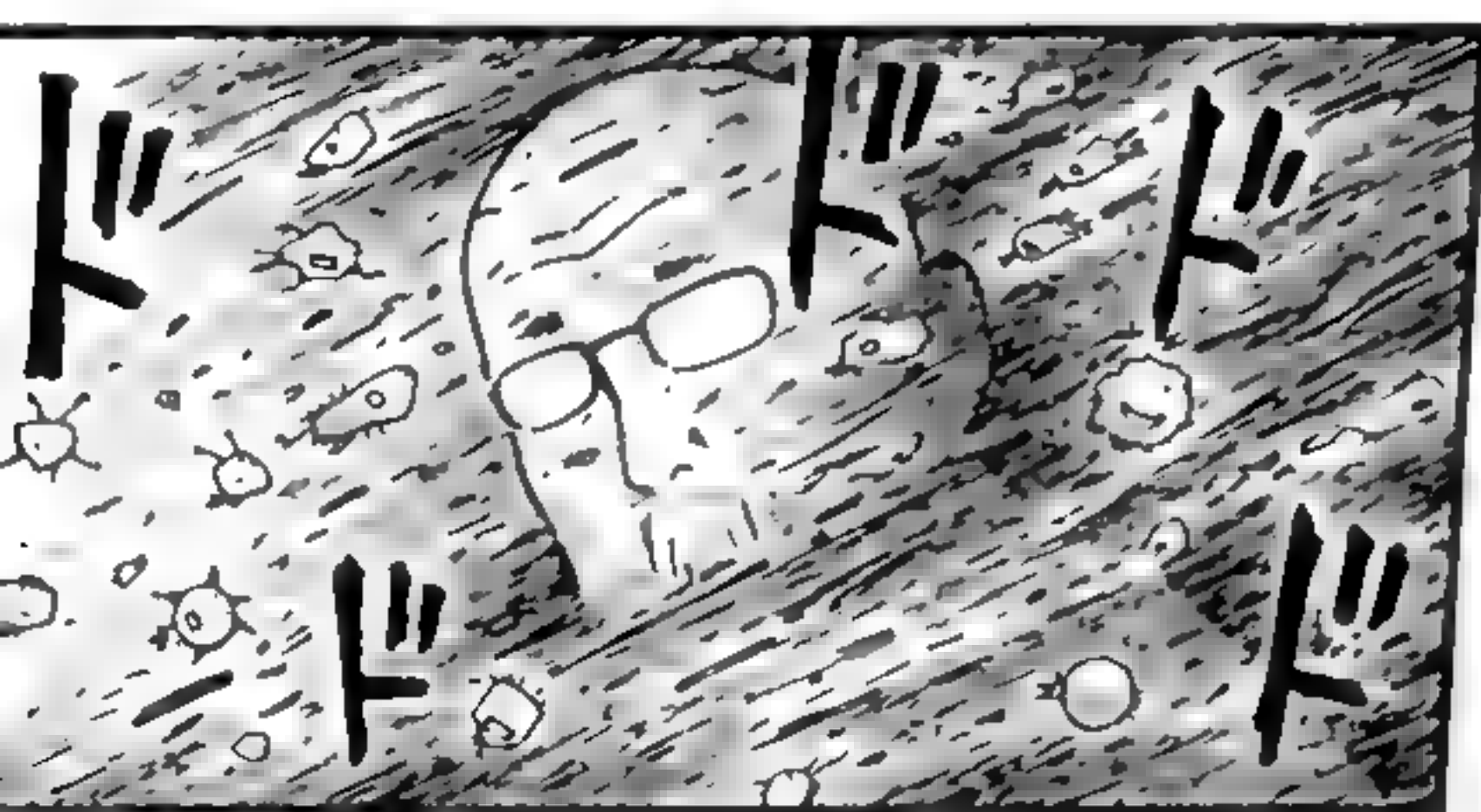
HE SAID THAT
HE SMELLED
SOMETHING BAD,
SO WHEN WE
CAME THIS WAY,
WE SAW THAT
NAME PLATE...

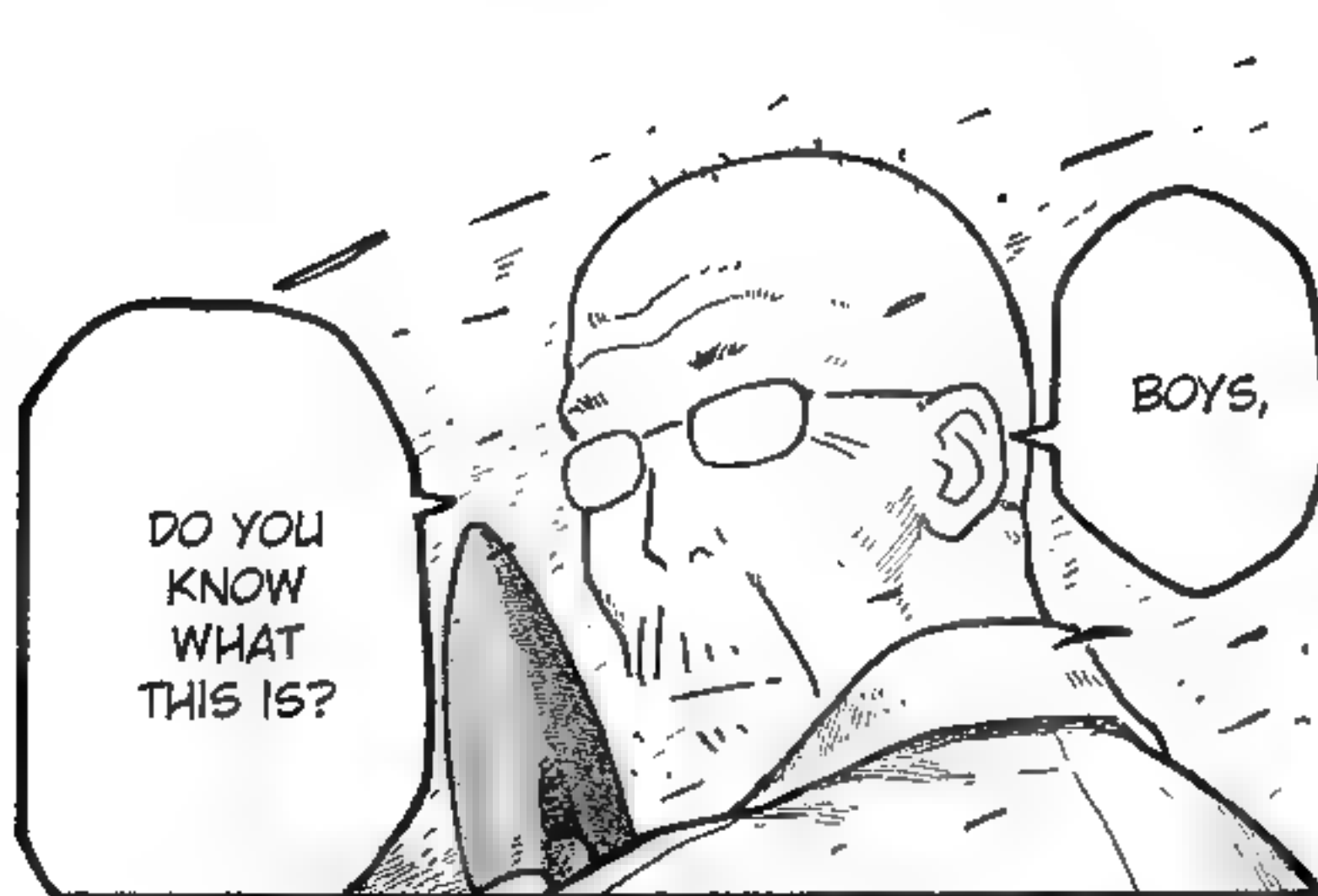
UH...HE HAS A
REALLY STRONG
SENSE OF
SMELL.

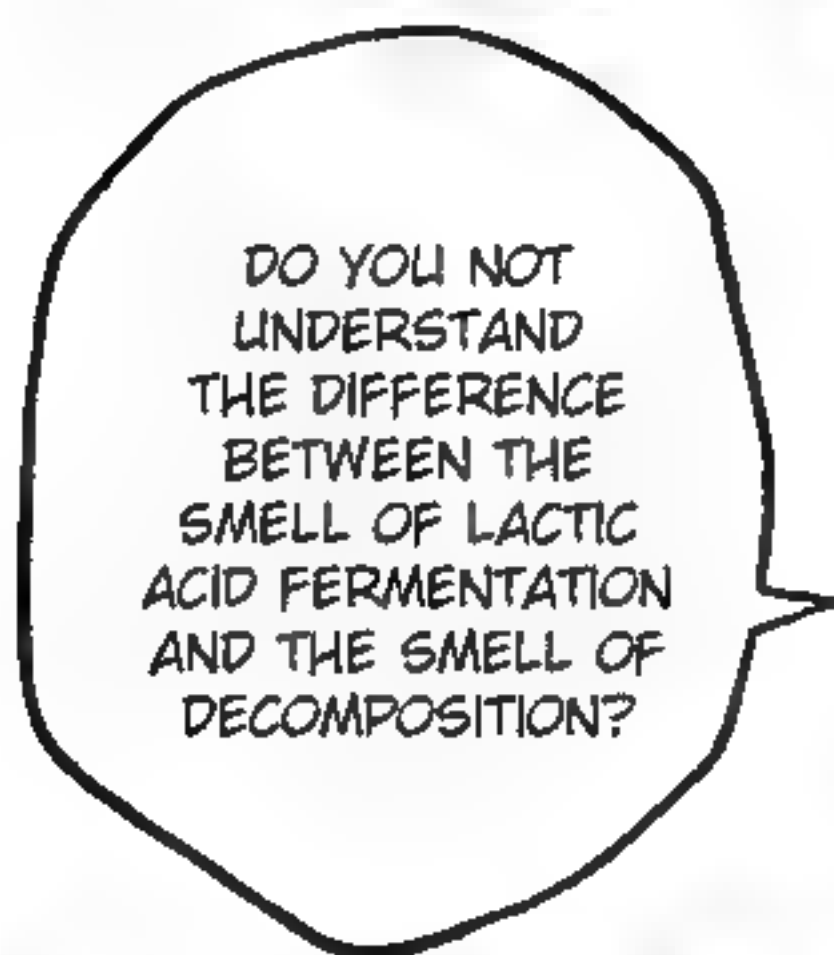
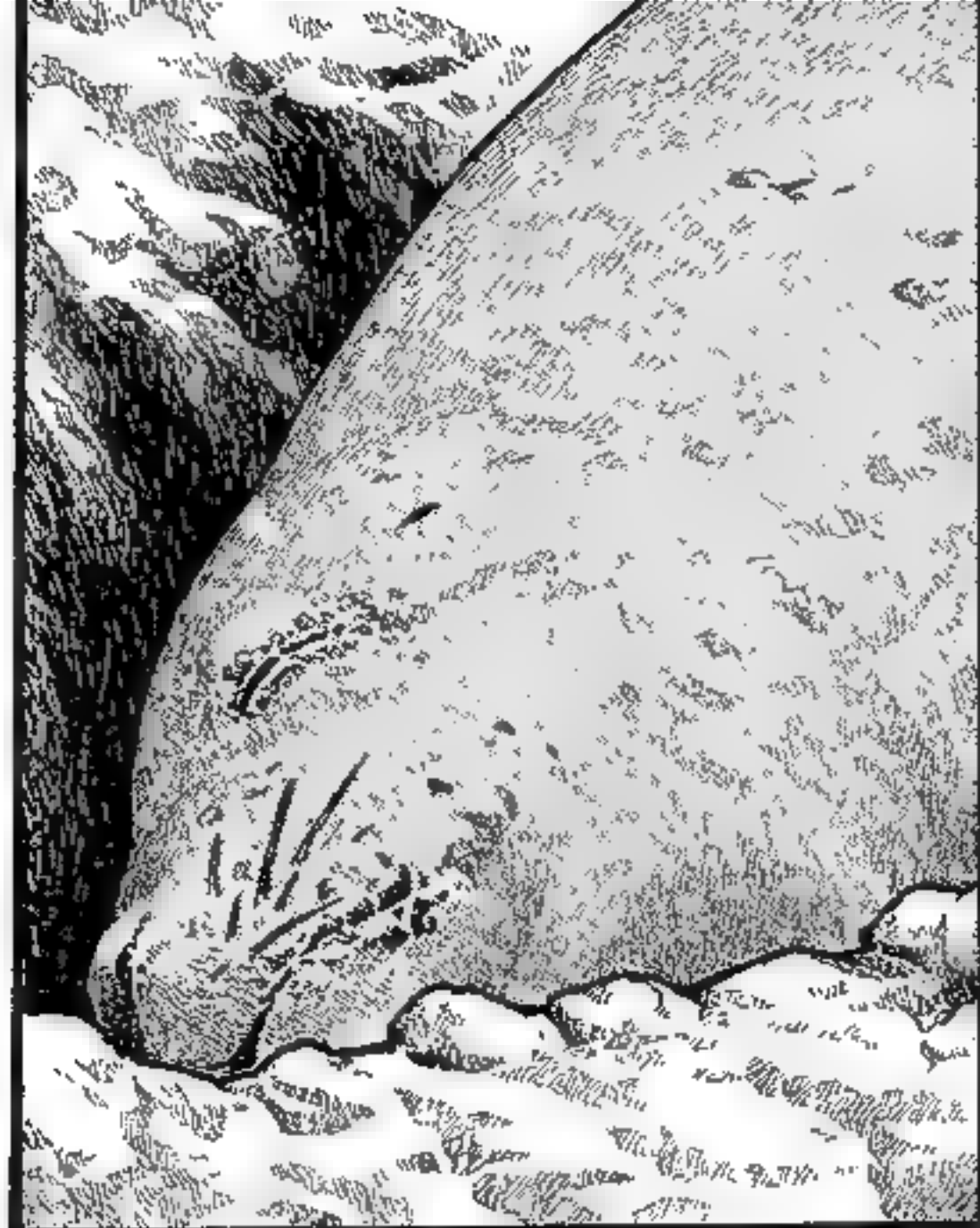






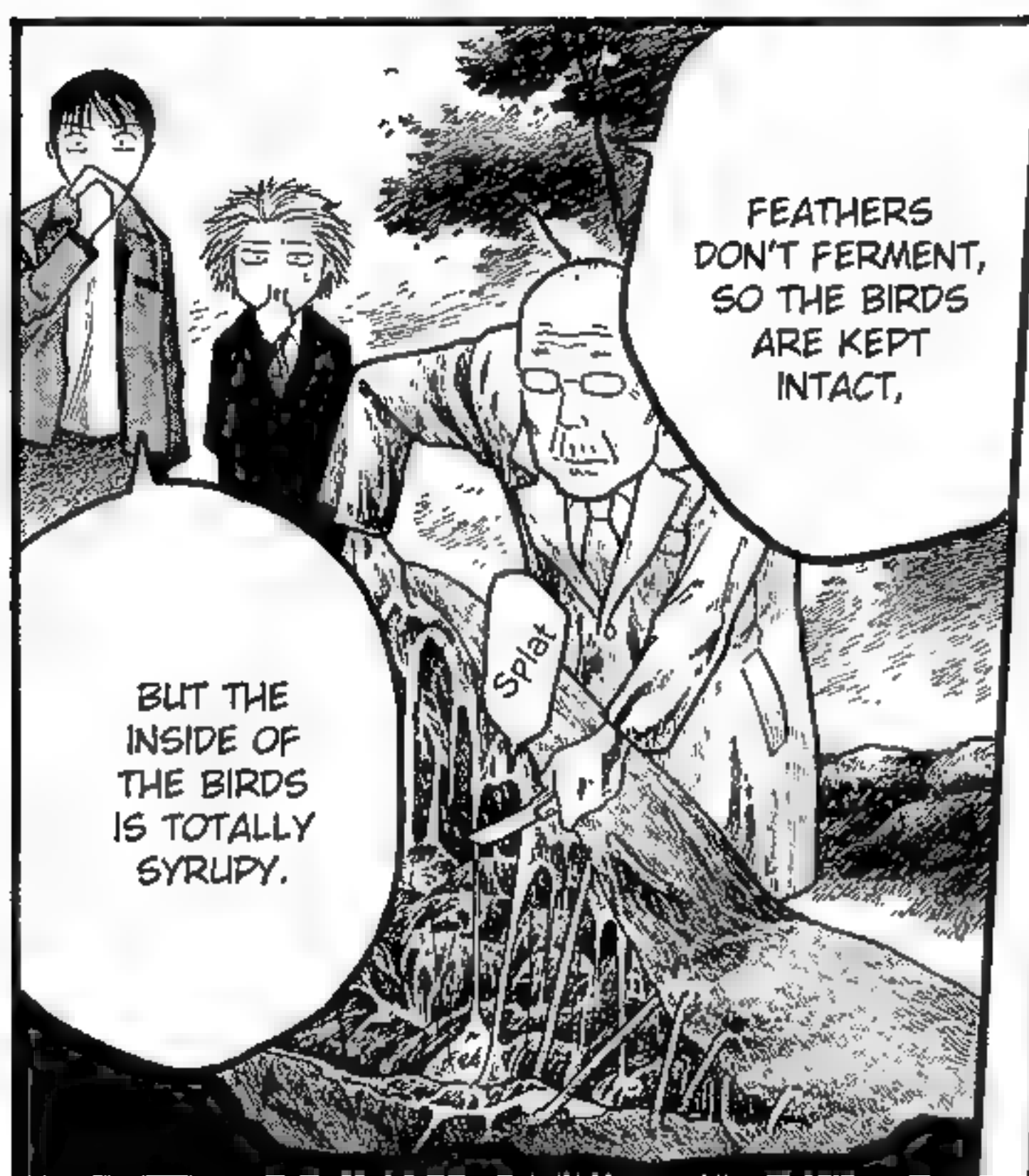
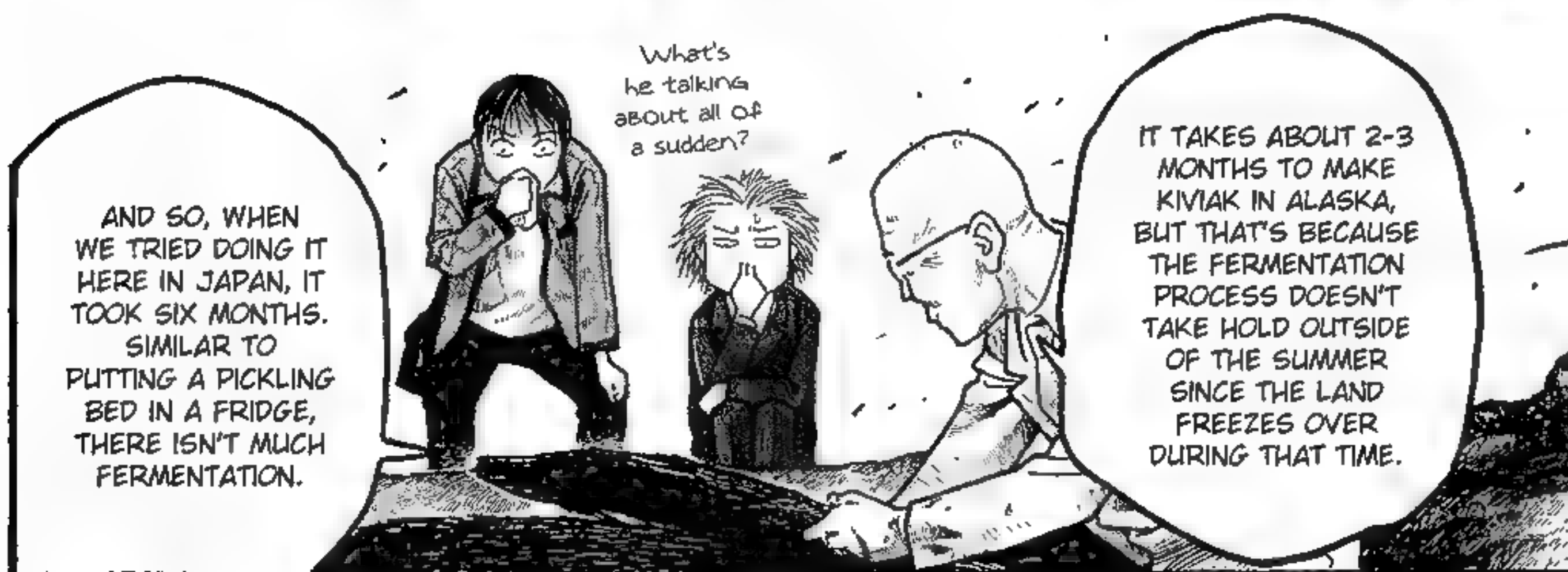






Tl note: Tama-chan was a seal spotted from 2002-2004 on the Tama River in Tokyo.



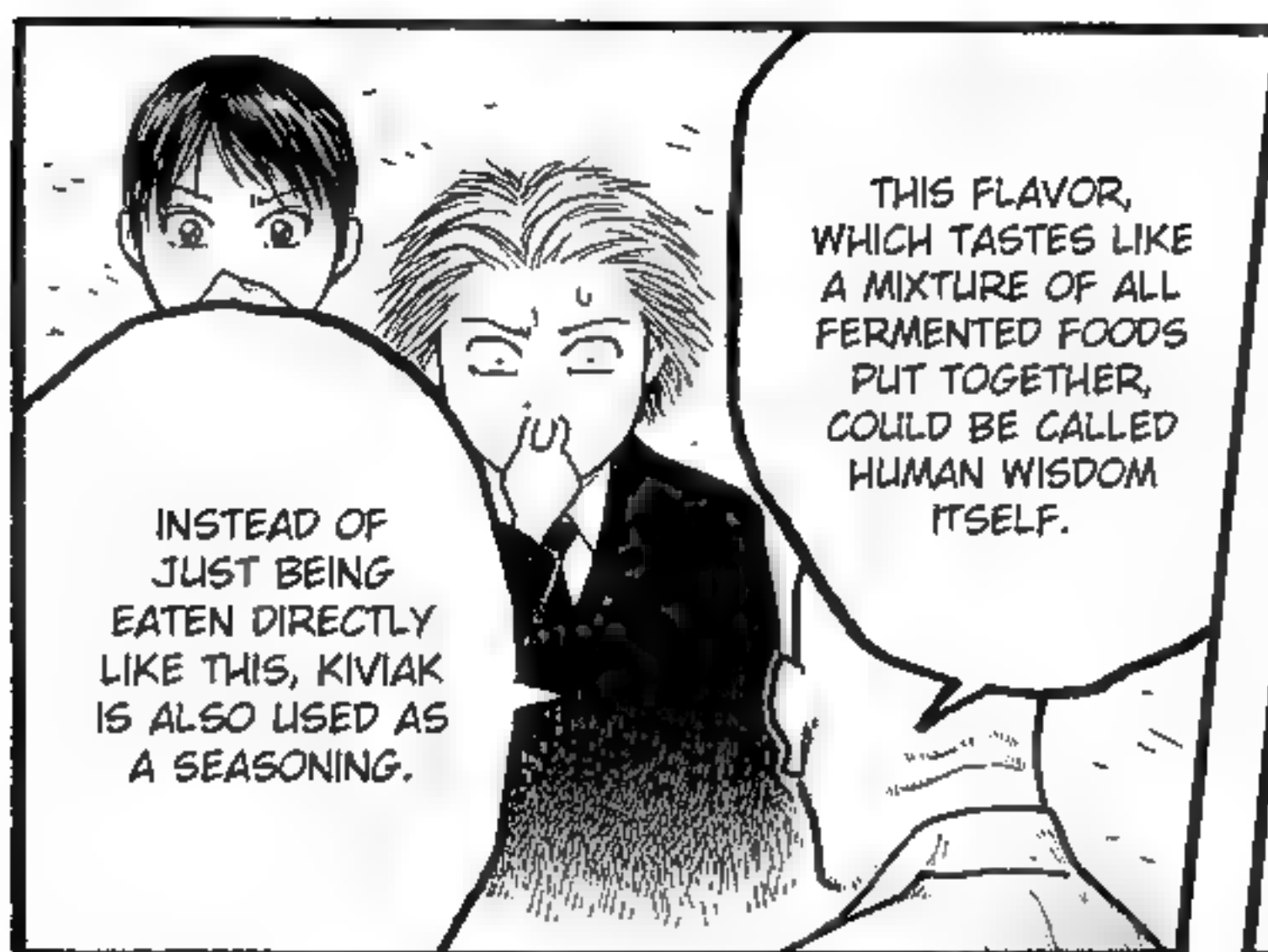




AND THE SYRUPY CONTENTS ARE SUCKED OUT DIRECTLY FROM THE BIRD'S ASS...

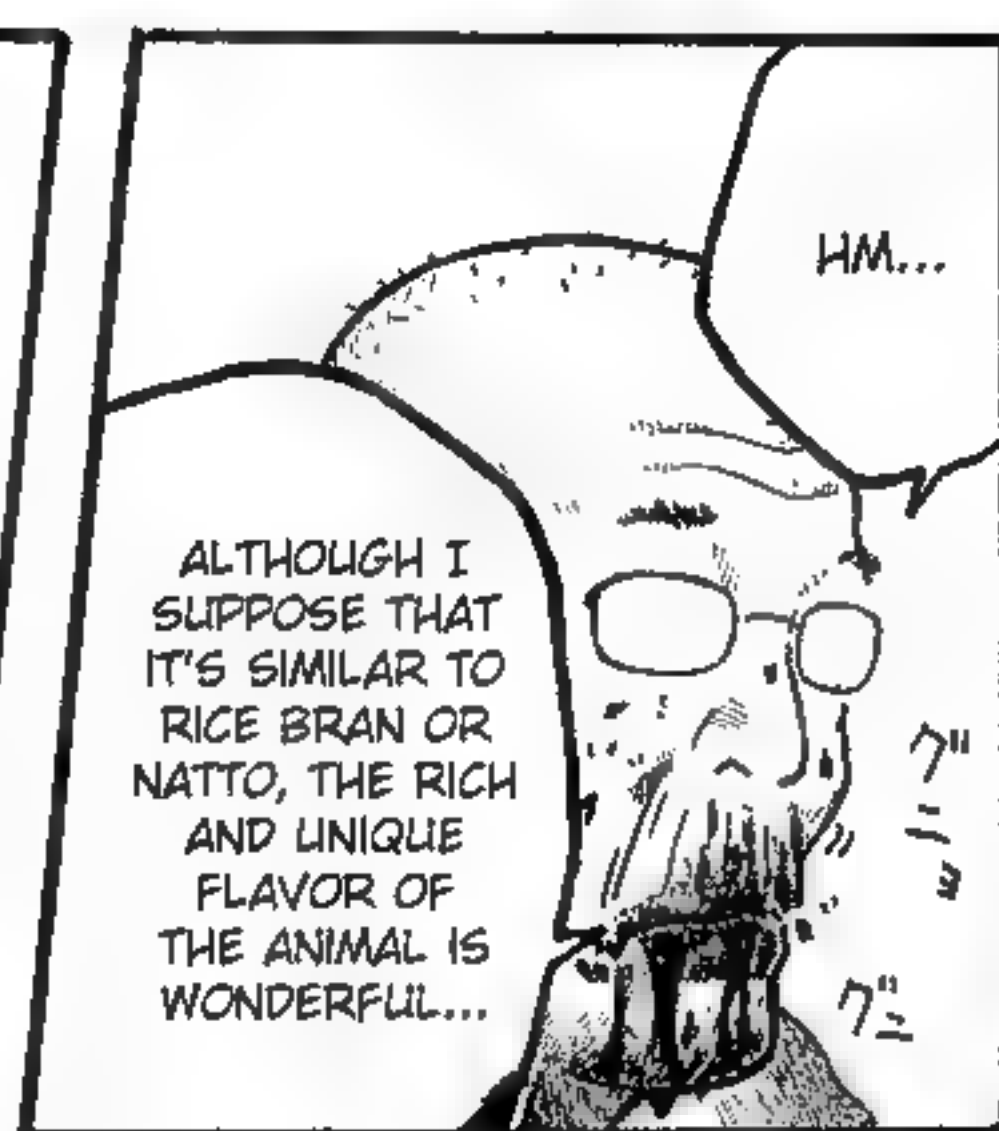


THE TAIL FEATHERS OF THE BIRDS ARE RIPPED OFF,

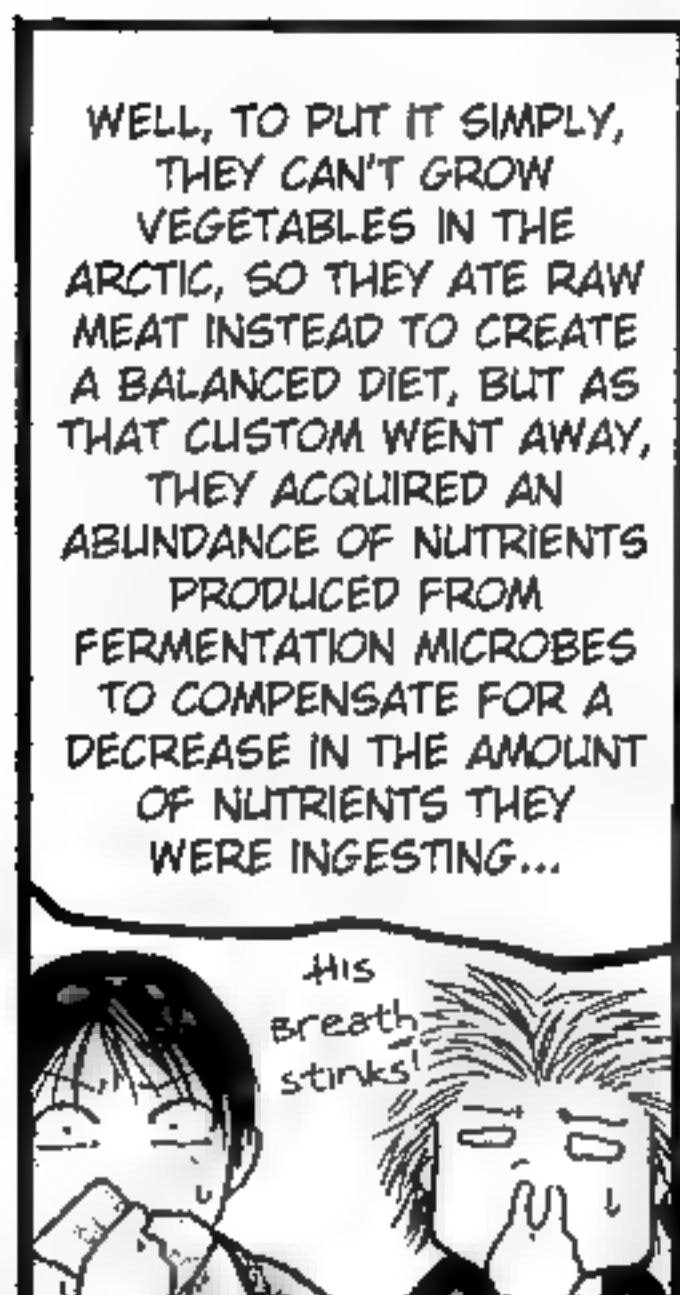


INSTEAD OF JUST BEING EATEN DIRECTLY LIKE THIS, KIVIAK IS ALSO USED AS A SEASONING.

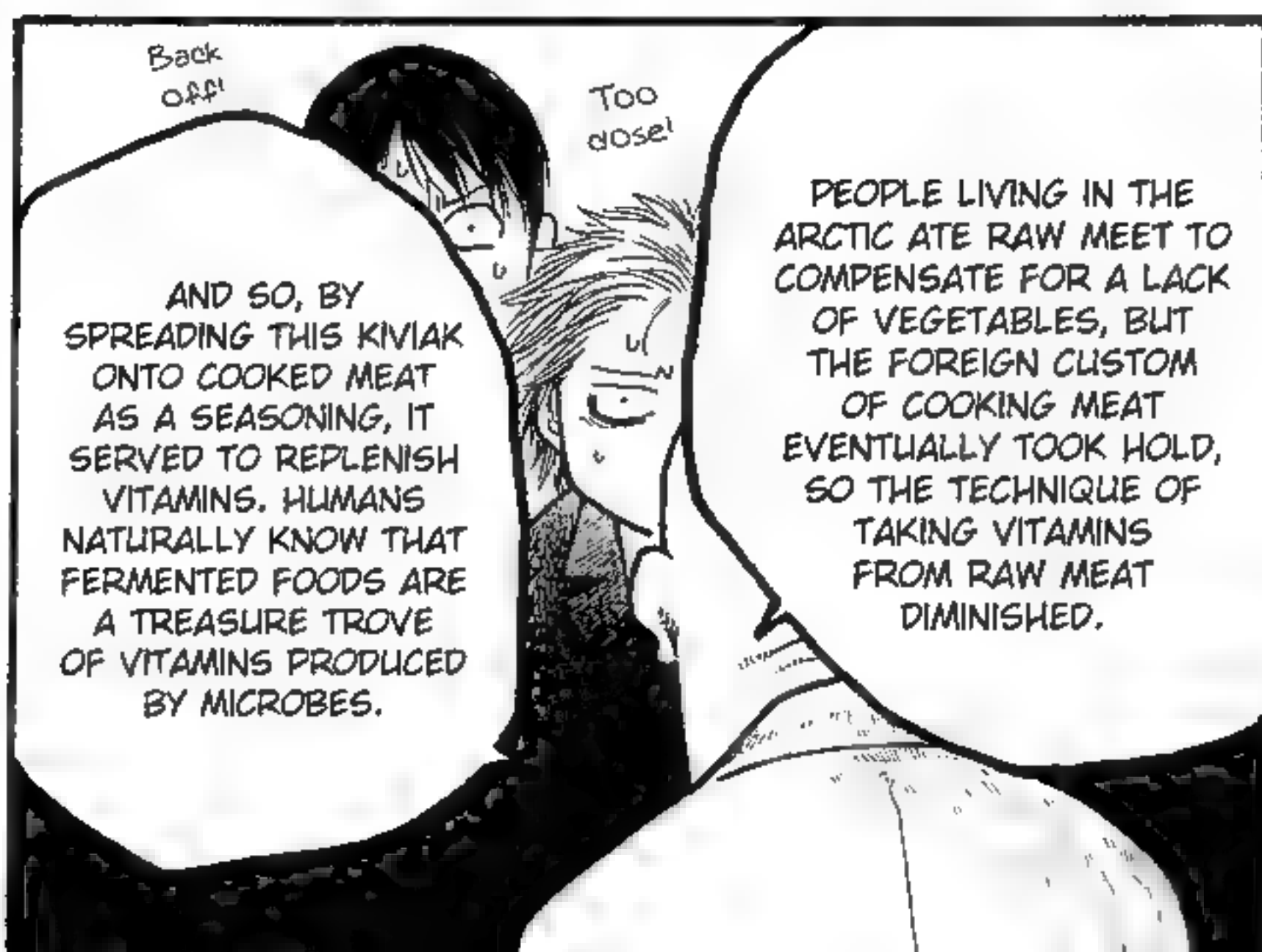
THIS FLAVOR, WHICH TASTES LIKE A MIXTURE OF ALL FERMENTED FOODS PUT TOGETHER, COULD BE CALLED HUMAN WISDOM ITSELF.



ALTHOUGH I SUPPOSE THAT IT'S SIMILAR TO RICE BRAN OR NATTO, THE RICH AND UNIQUE FLAVOR OF THE ANIMAL IS WONDERFUL...

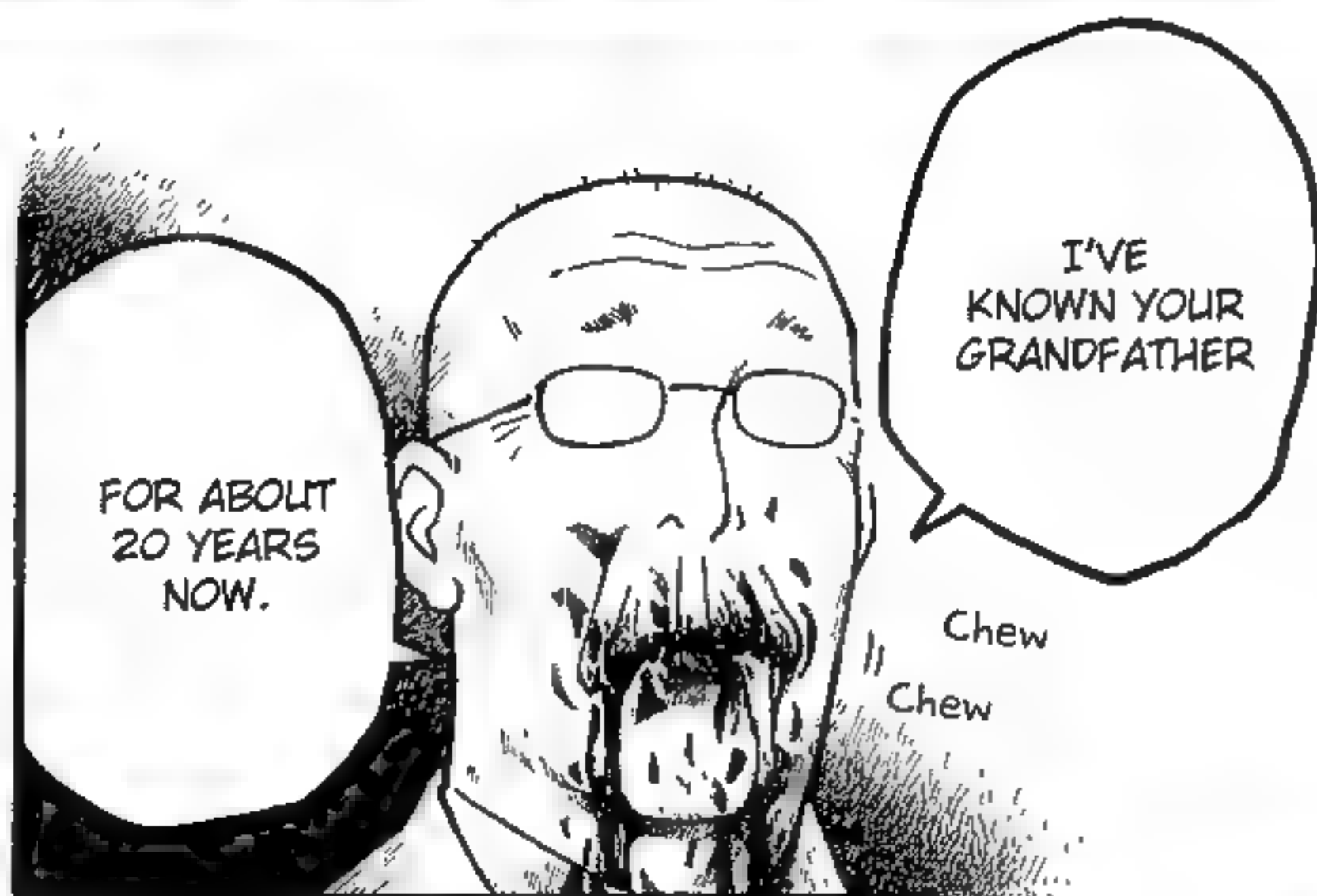


WELL, TO PUT IT SIMPLY, THEY CAN'T GROW VEGETABLES IN THE ARCTIC, SO THEY ATE RAW MEAT INSTEAD TO CREATE A BALANCED DIET, BUT AS THAT CUSTOM WENT AWAY, THEY ACQUIRED AN ABUNDANCE OF NUTRIENTS PRODUCED FROM FERMENTATION MICROBES TO COMPENSATE FOR A DECREASE IN THE AMOUNT OF NUTRIENTS THEY WERE INGESTING...



AND SO, BY SPREADING THIS KIVIAK ONTO COOKED MEAT AS A SEASONING, IT SERVED TO REPLENISH VITAMINS. HUMANS NATURALLY KNOW THAT FERMENTED FOODS ARE A TREASURE TROVE OF VITAMINS PRODUCED BY MICROBES.

PEOPLE LIVING IN THE ARCTIC ATE RAW MEAT TO COMPENSATE FOR A LACK OF VEGETABLES, BUT THE FOREIGN CUSTOM OF COOKING MEAT EVENTUALLY TOOK HOLD, SO THE TECHNIQUE OF TAKING VITAMINS FROM RAW MEAT DIMINISHED.









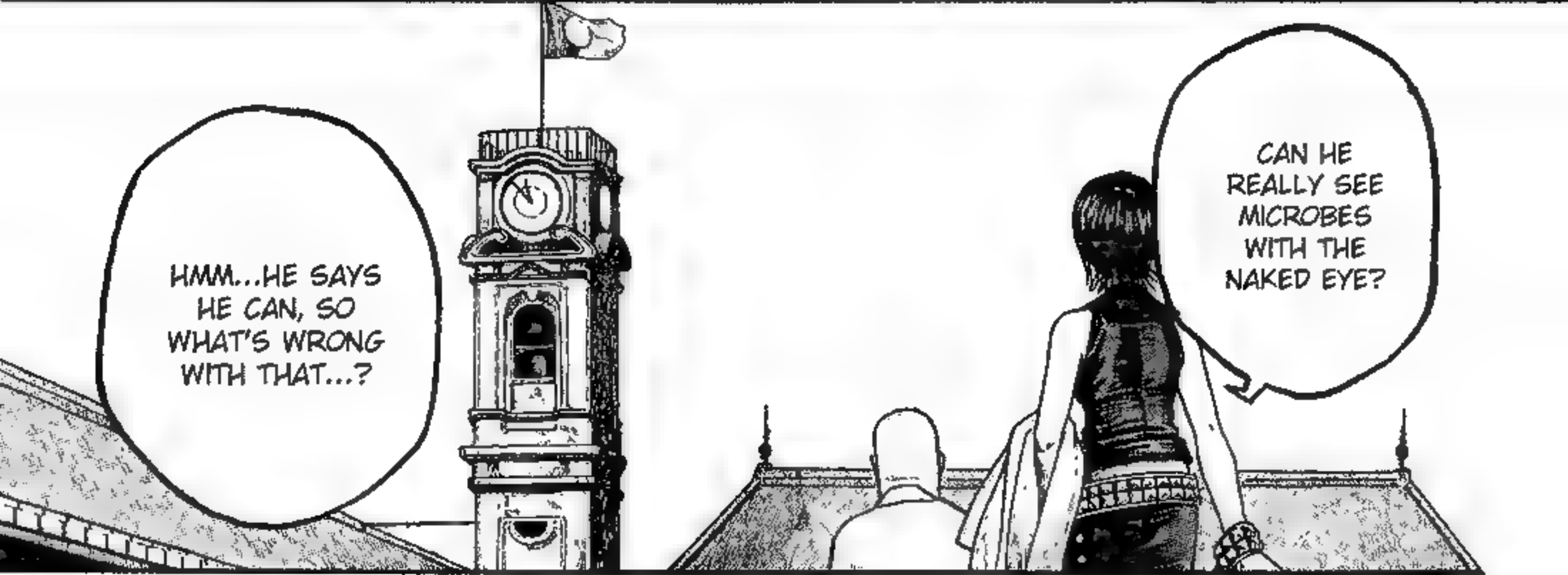
Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com



IS THE
SMALLER
ONE
SAWAKI?



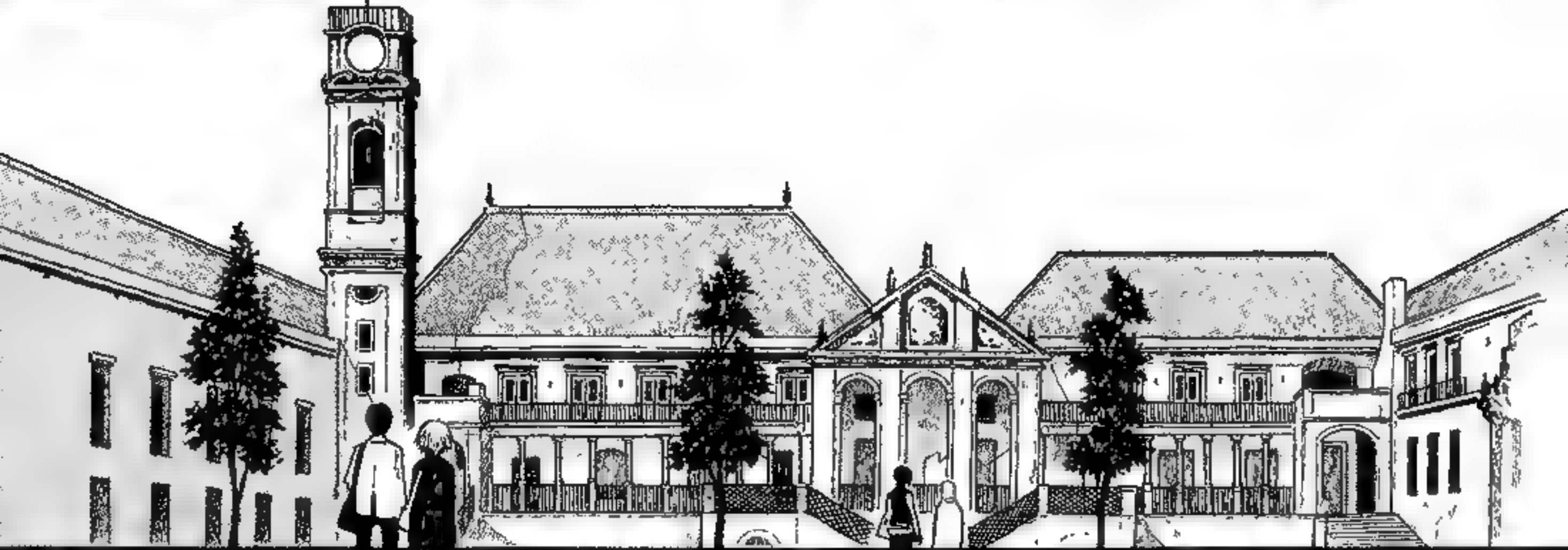
HMM...HE SAYS
HE CAN, SO
WHAT'S WRONG
WITH THAT...?

CAN HE
REALLY SEE
MICROBES
WITH THE
NAKED EYE?



AH...
OKAY.

WHAT ARE
YOU TWO
DOING?
HURRY UP.



☆ The title changed with the second chapter! Sorry!!

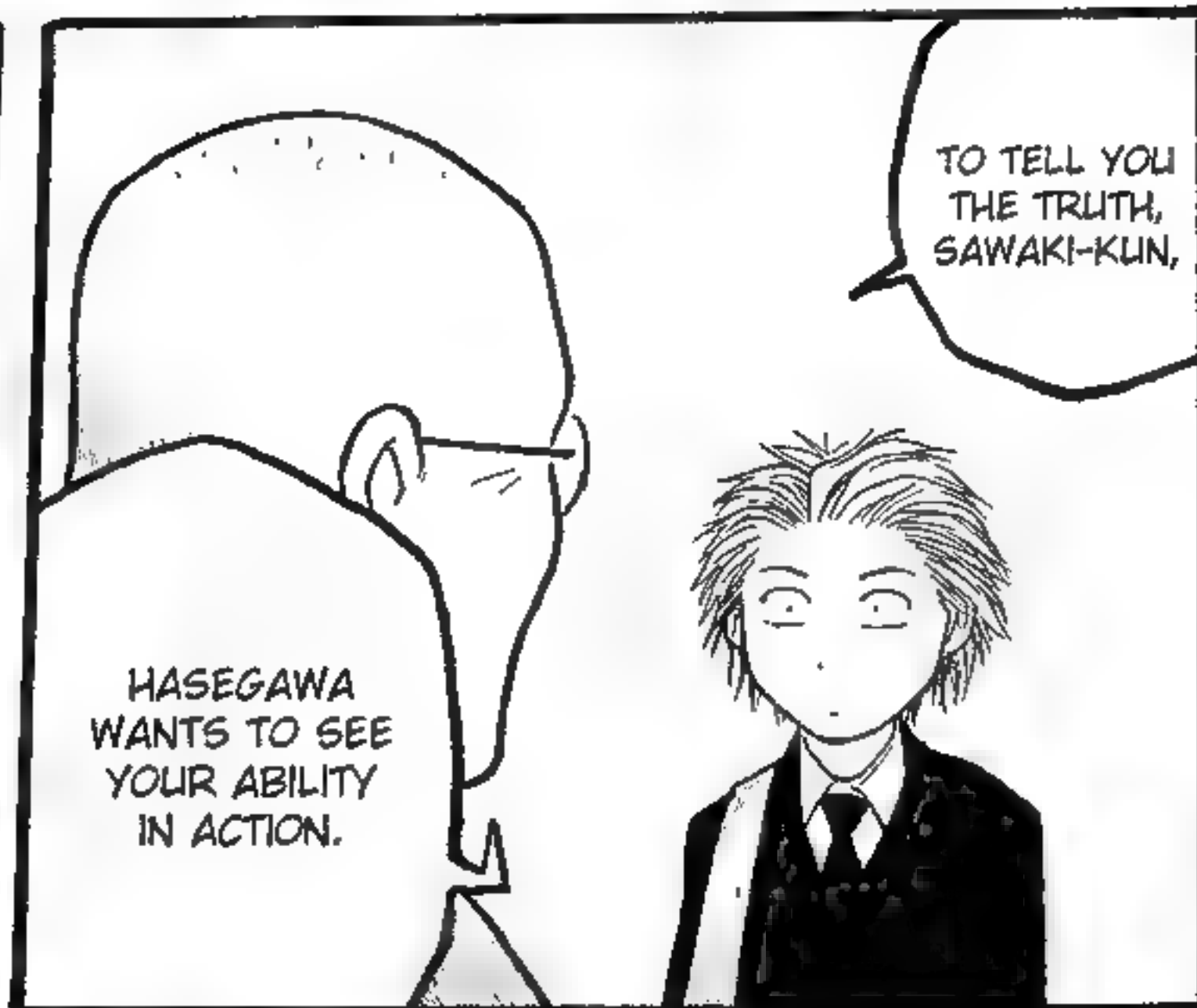
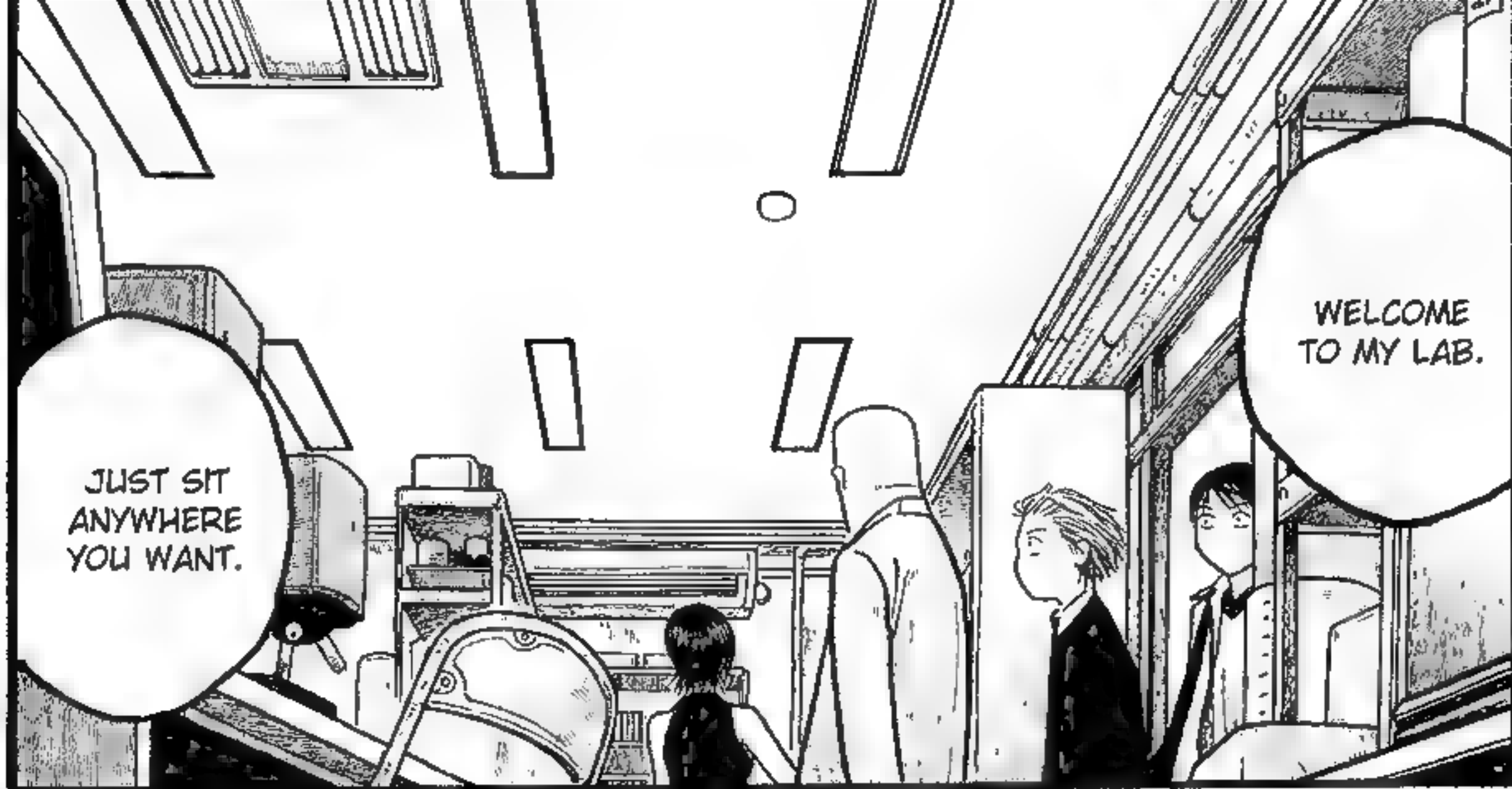
NOUDAI MONOGATARI

おやじもん

SAWAKI-KUN,

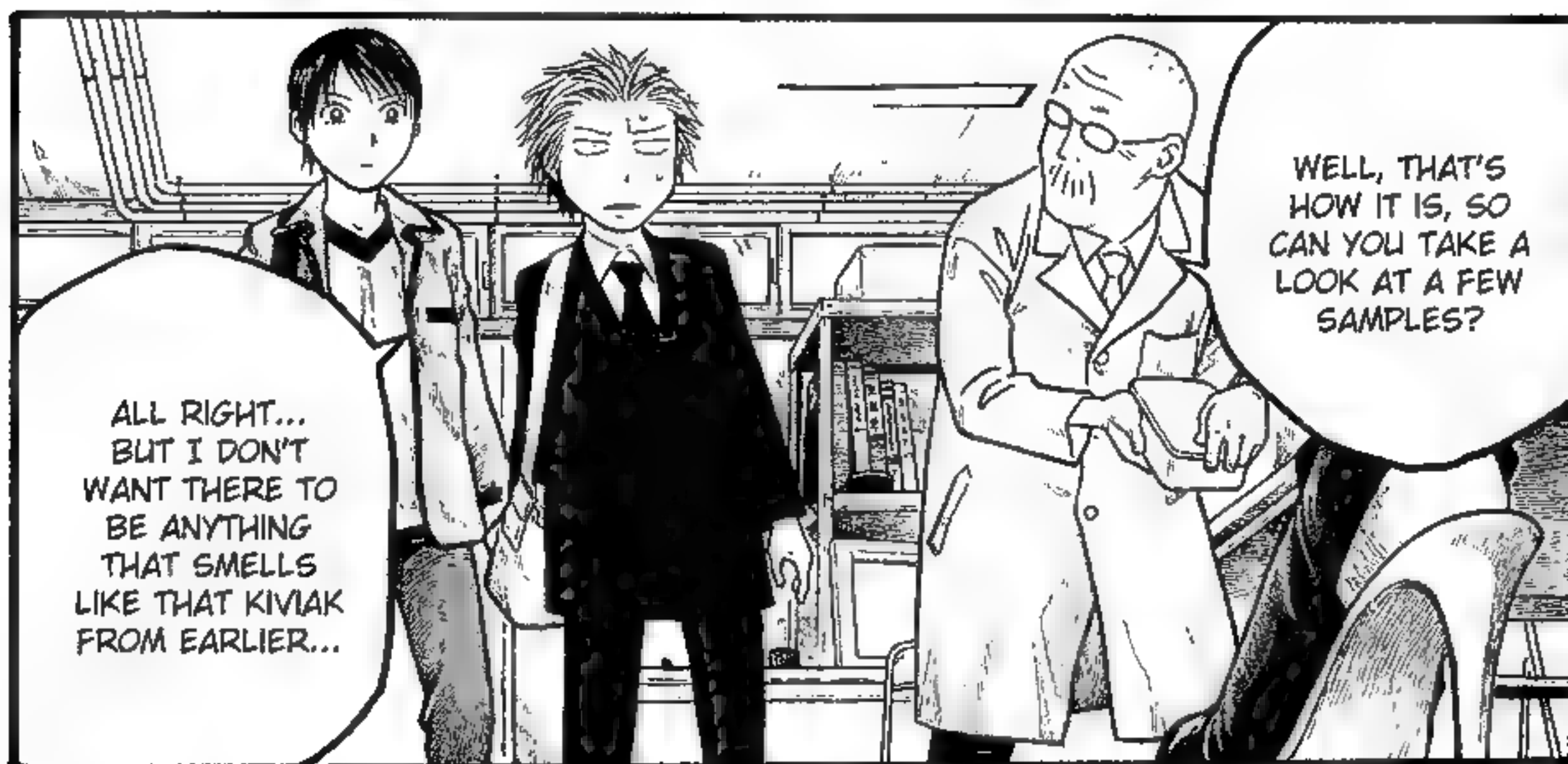
I'M GLAD YOU
CAME TO SEE
ME LIKE YOUR
GRANDFATHER
TOLD YOU TO.

CH. 2: ABILITY





Tadayasu Sawaki
He's the main character
His parents run a koji mold-starter supplier
For some reason, he can see microbes.



Kei Yuuki
He's been Sawaki's friend since they were kids
His parents run a sake brewery



Haruka Hasegawa
She's a graduate student at a certain agricultural university
She's one of Professor Itsuki's students.



A. oryzae
It thinks it can do pretty much anything by itself



A. sojae
It's long-winded when it comes to flavor.



Pediococcus halophilus
It acts like a sommelier



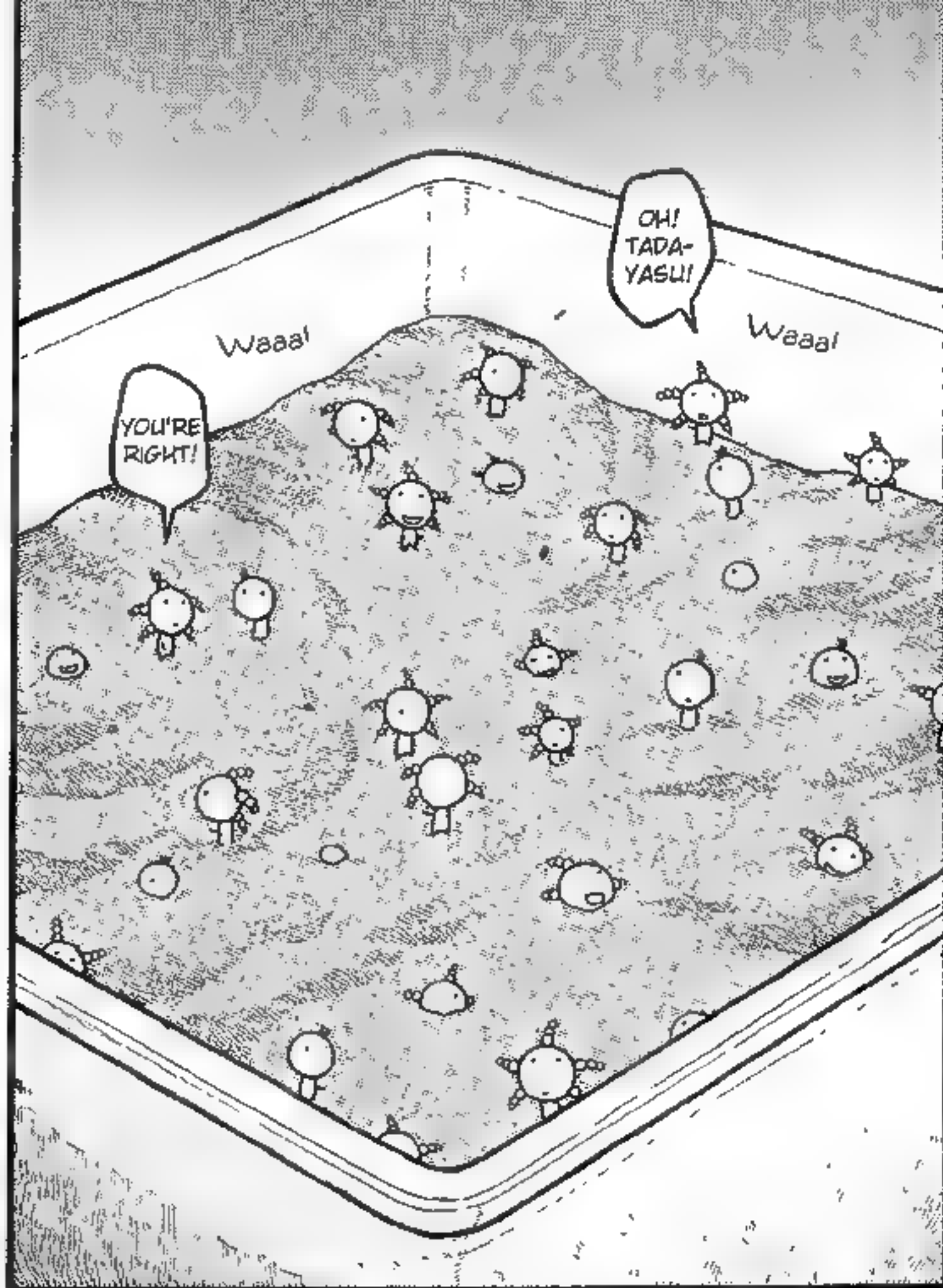
Keizou Itsuki
He's a professor at a certain agricultural university. He's a friend of Sawaki's grandfather



HEY...HOW ARE YOU SO CERTAIN YOUR FAMILY MADE THIS?

WELL... THIS IS THE KOJI MOLD CULTURE MY FAMILY GROWS.

Don't close it!
Tadayasu!

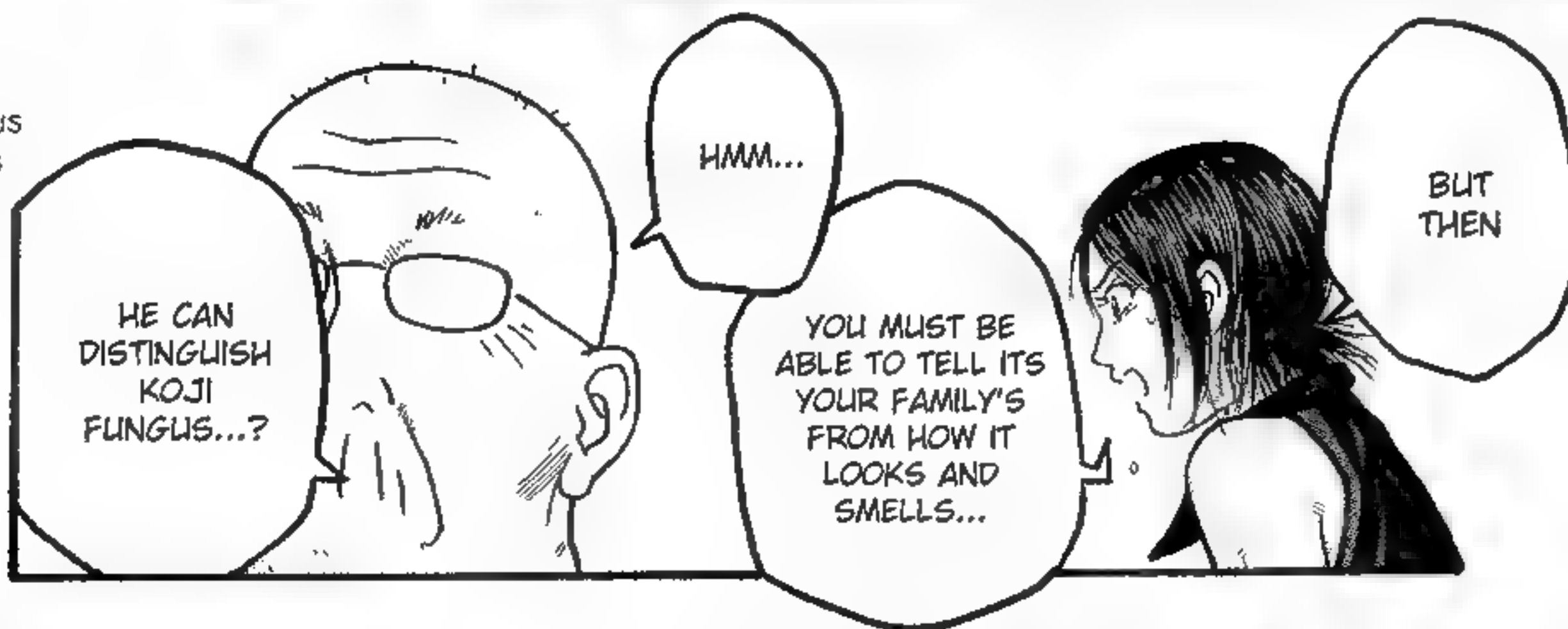


OH! TADA-YASU!

Waaal

Waaal

YOU'RE RIGHT!



HE CAN DISTINGUISH KOJI FUNGUS...?

HMM...

YOU MUST BE ABLE TO TELL ITS YOUR FAMILY'S FROM HOW IT LOOKS AND SMELLS...

BUT THEN

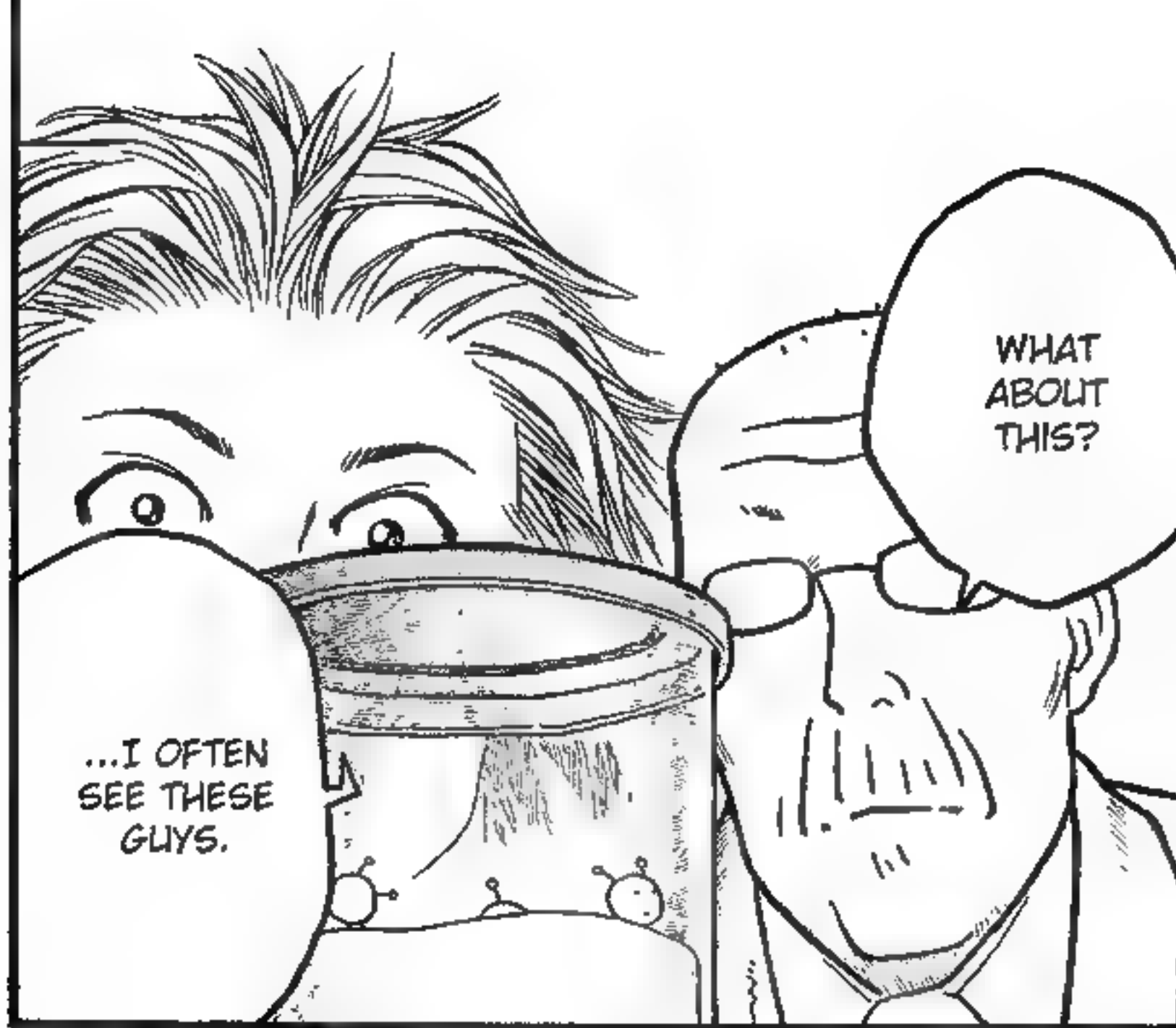


I KINDA HAVE MIXED FEELINGS ABOUT IT.

EVEN THOUGH I CAME TO TOKYO TO GET AWAY FROM THIS SMELL,

ALL RIGHT.

PROFESSOR, CAN'T WE MAKE IT A LITTLE HARDER FOR HIM?

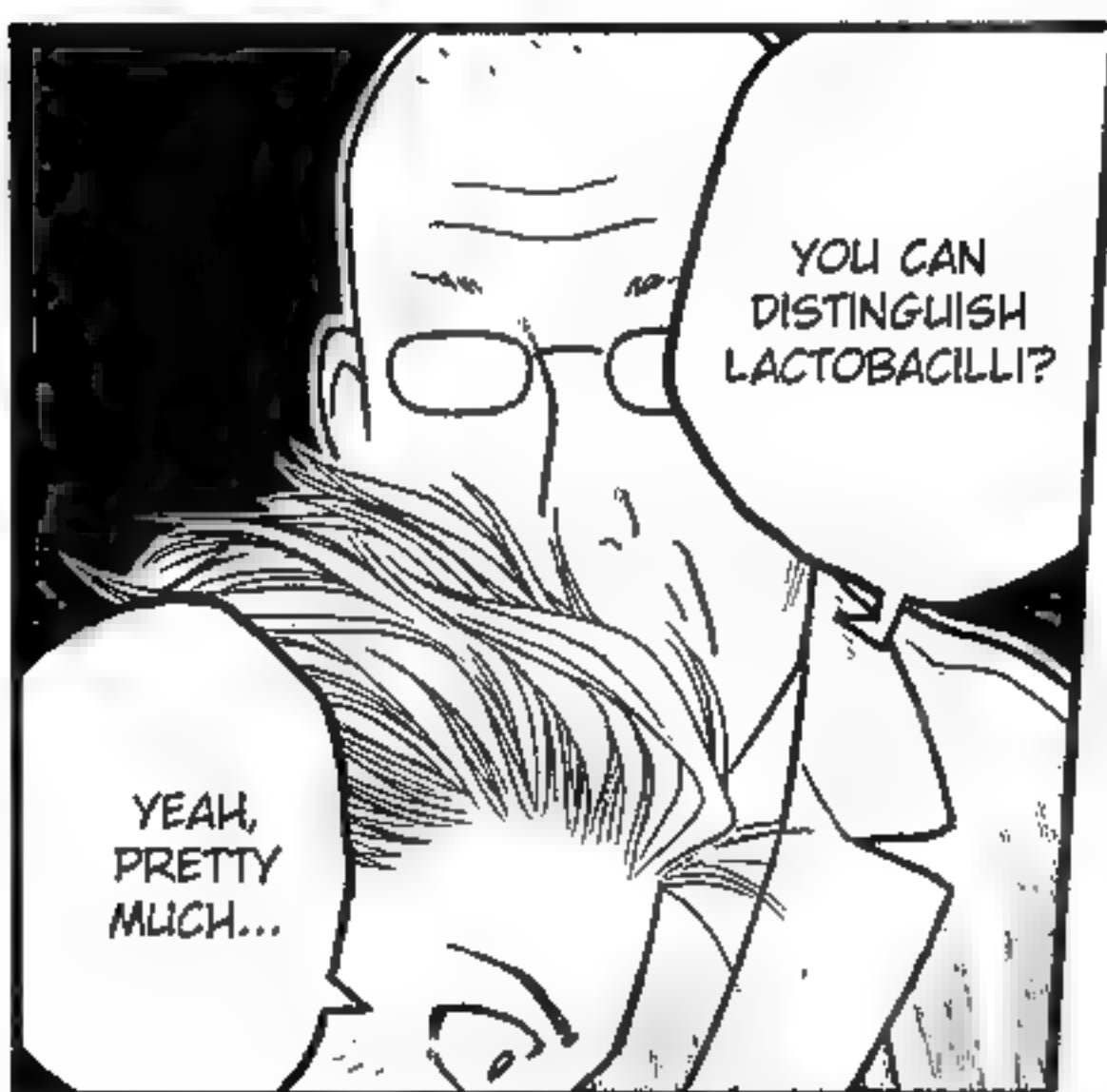


Thunk





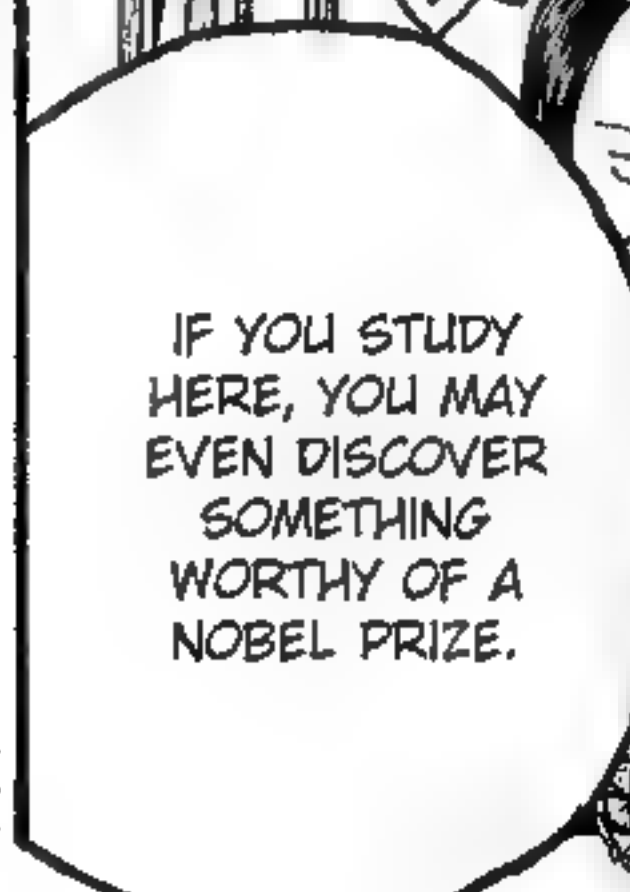
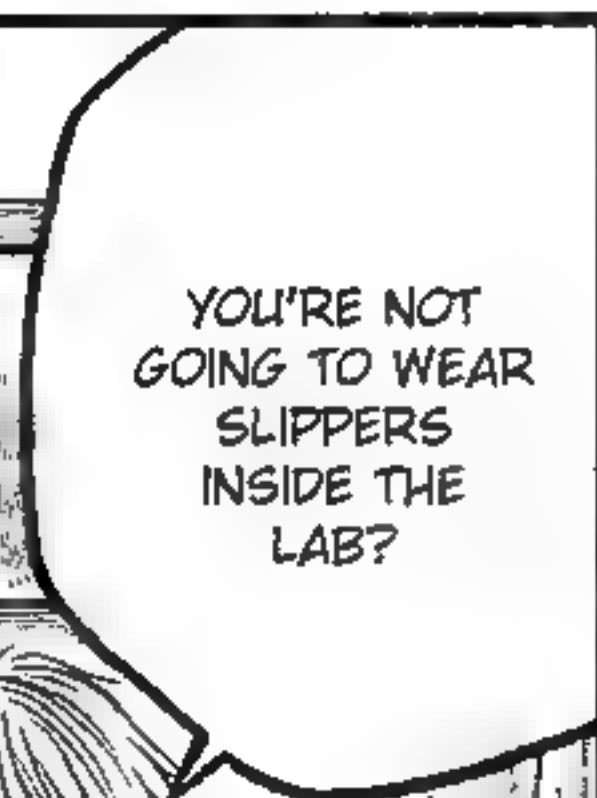
 S. lactis
It acts like a special attack unit.



 L. bulgaricus
It also likes the summer



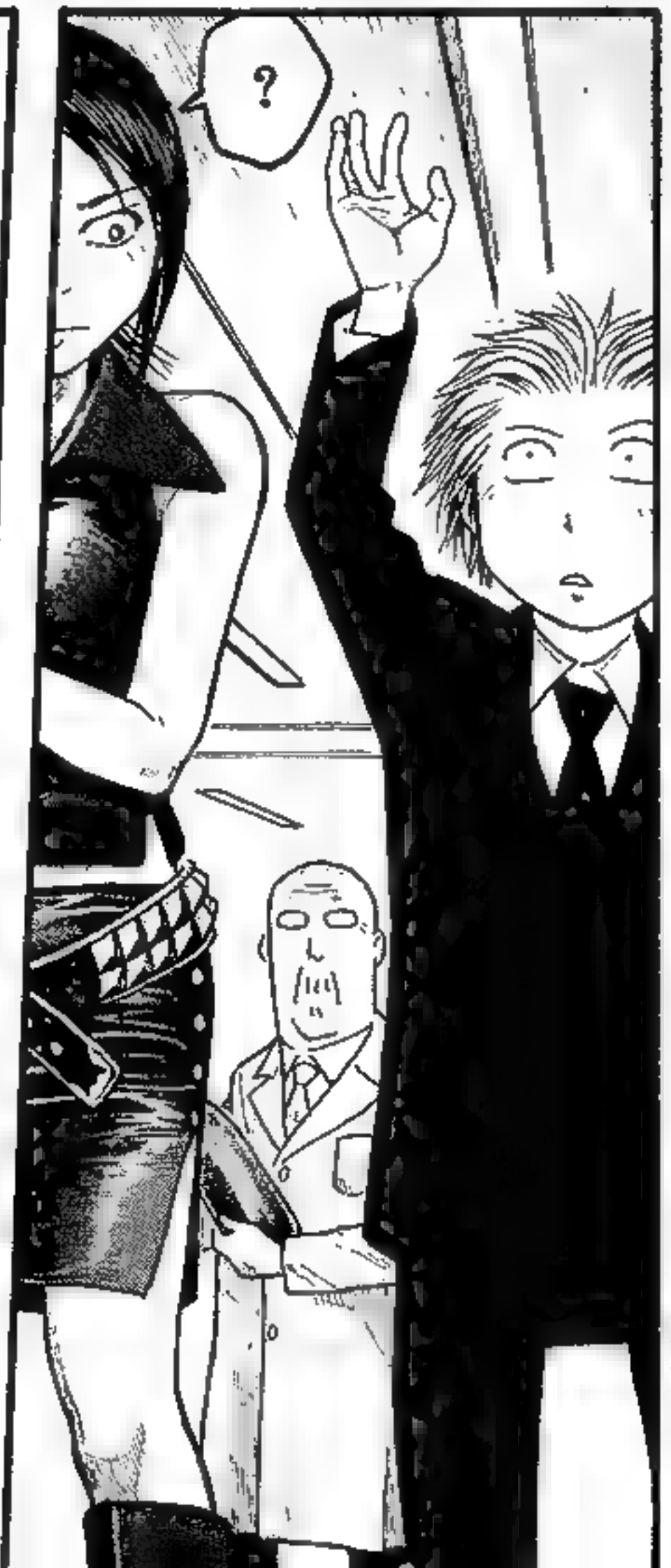
 L. jugurti
It doesn't speak archaic Japanese



L.
plantarum
It's
looking for
someone
rich who
will support
and love it.



A. aceti
It feels at ease when it crystallizes







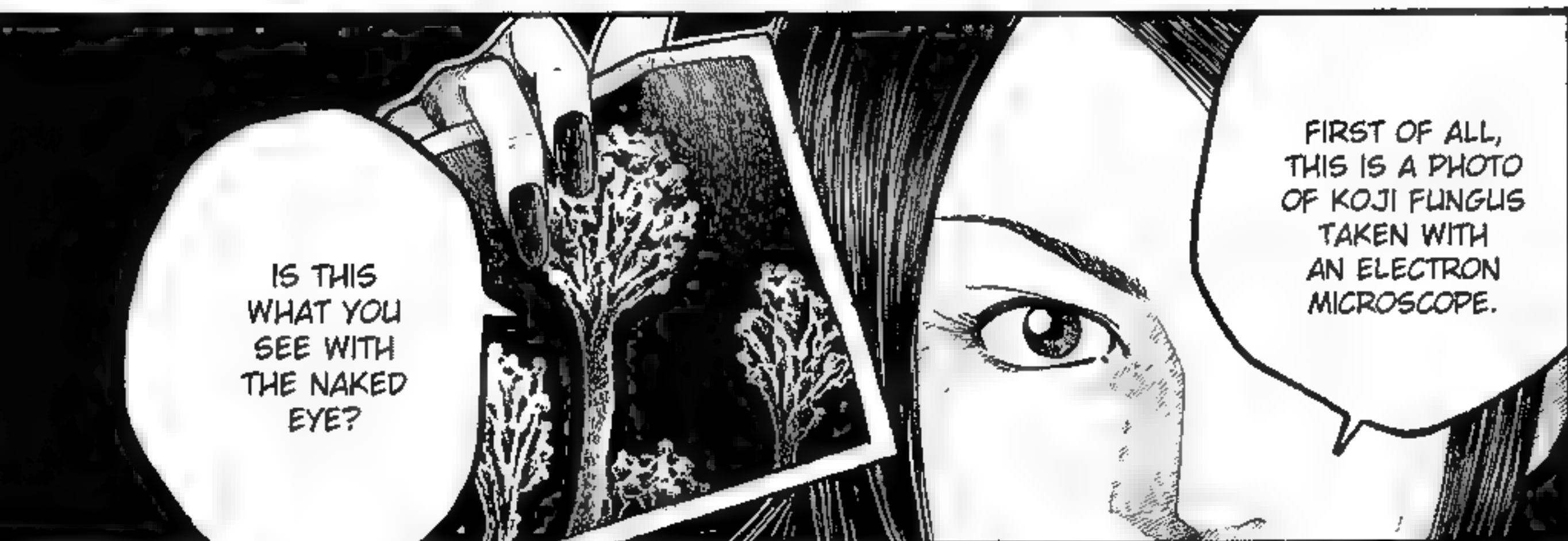
YOU
WANT TO
DO MORE?

IT'LL
BE OVER
SOON.



SAWAKI-
KUN,

CAN I
ASK YOU
SOMETHING,
TOO?



IS THIS
WHAT YOU
SEE WITH
THE NAKED
EYE?

FIRST OF ALL,
THIS IS A PHOTO
OF KOJI FUNGUS
TAKEN WITH
AN ELECTRON
MICROSCOPE.



SORRY, BUT I
HAVE A LOT
OF TROUBLE
BELIEVING
YOU,

They look
like this.

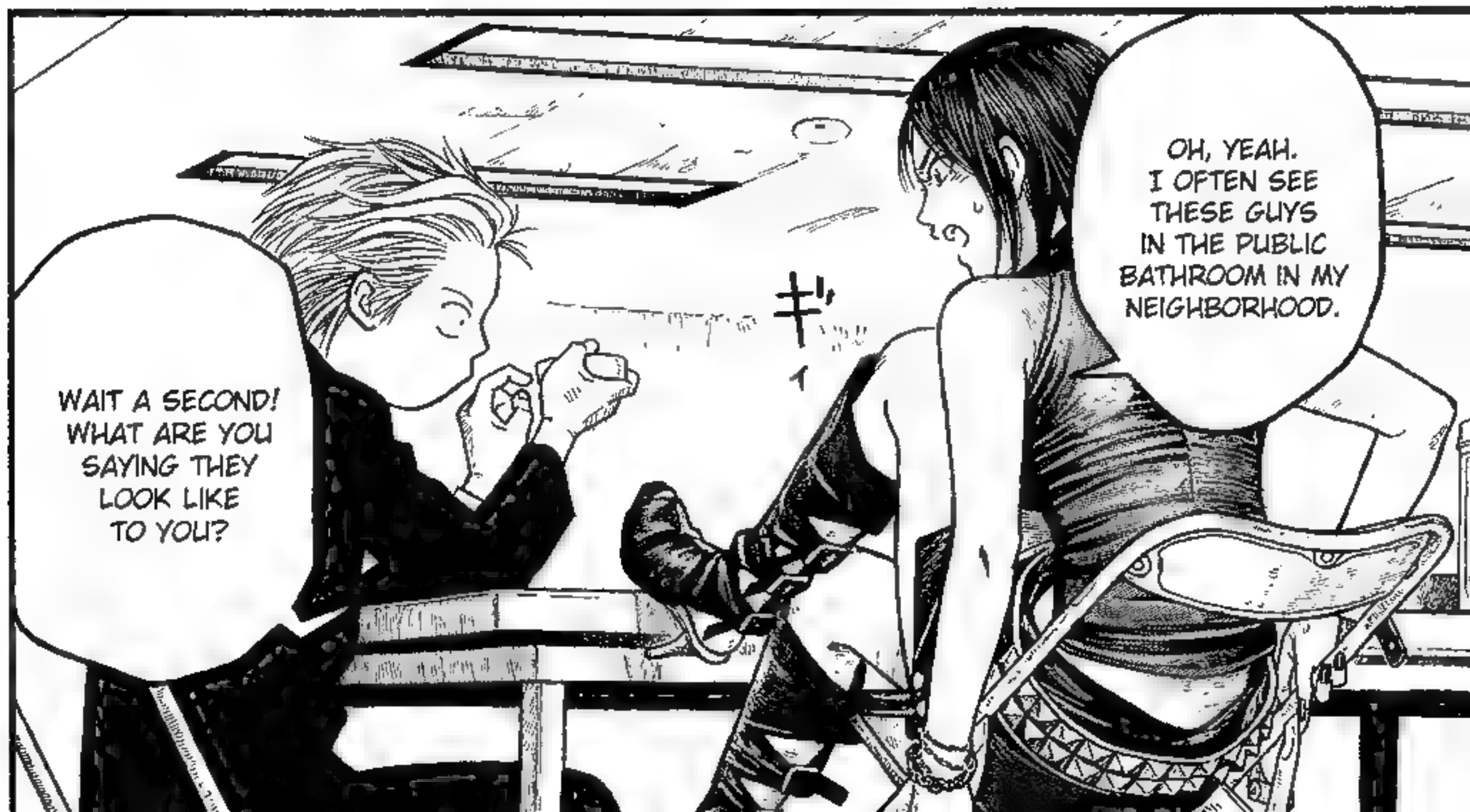
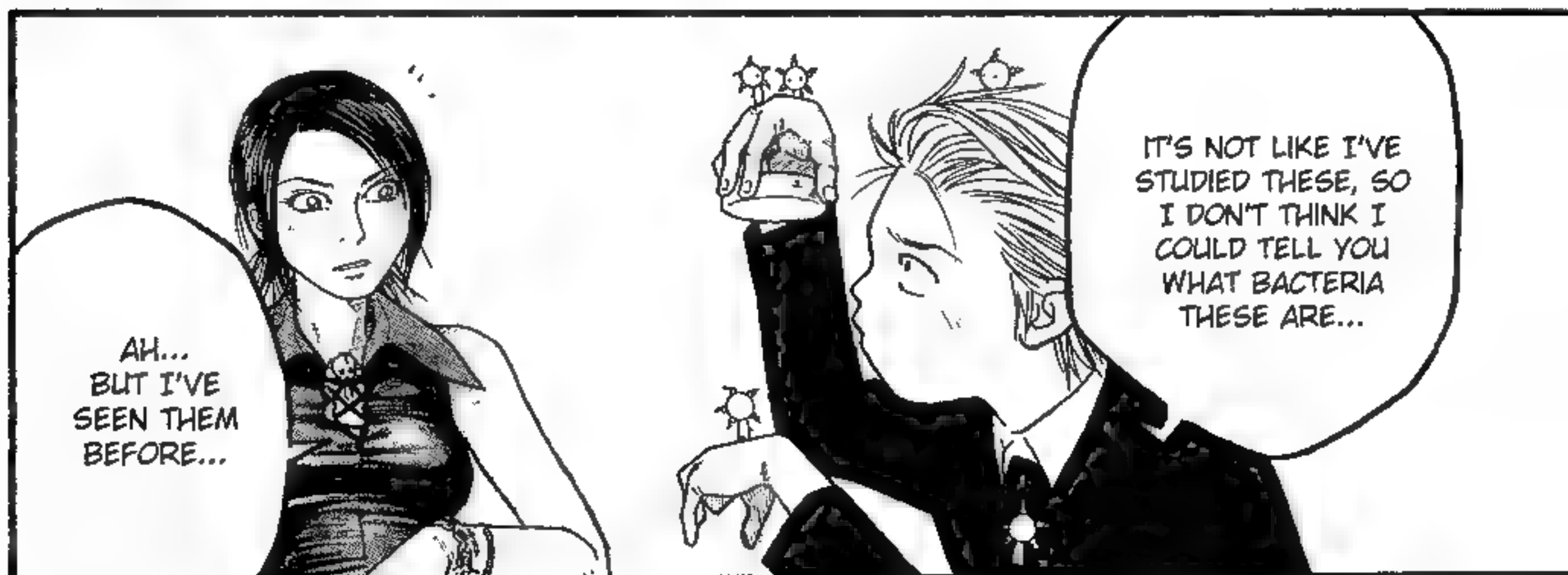
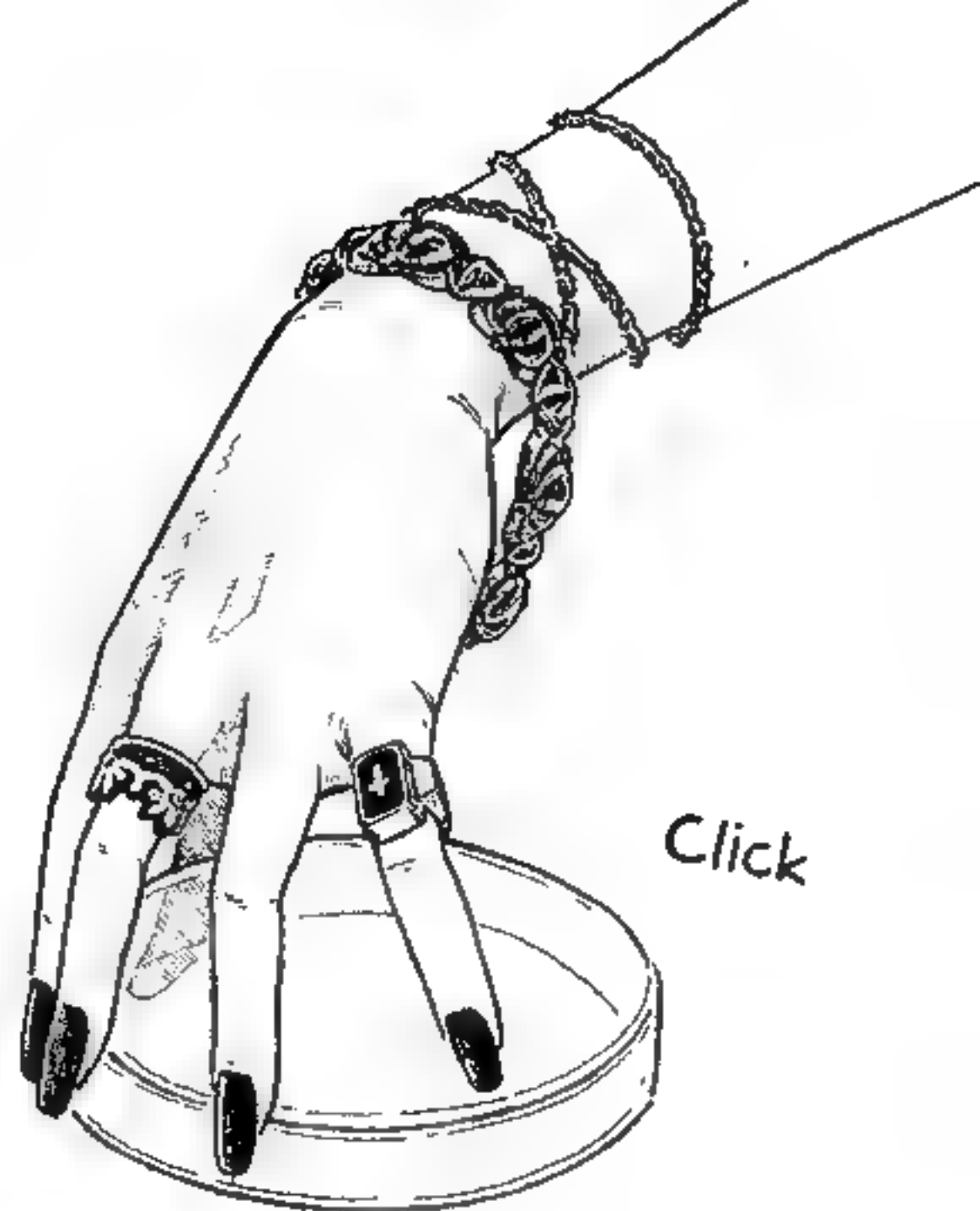
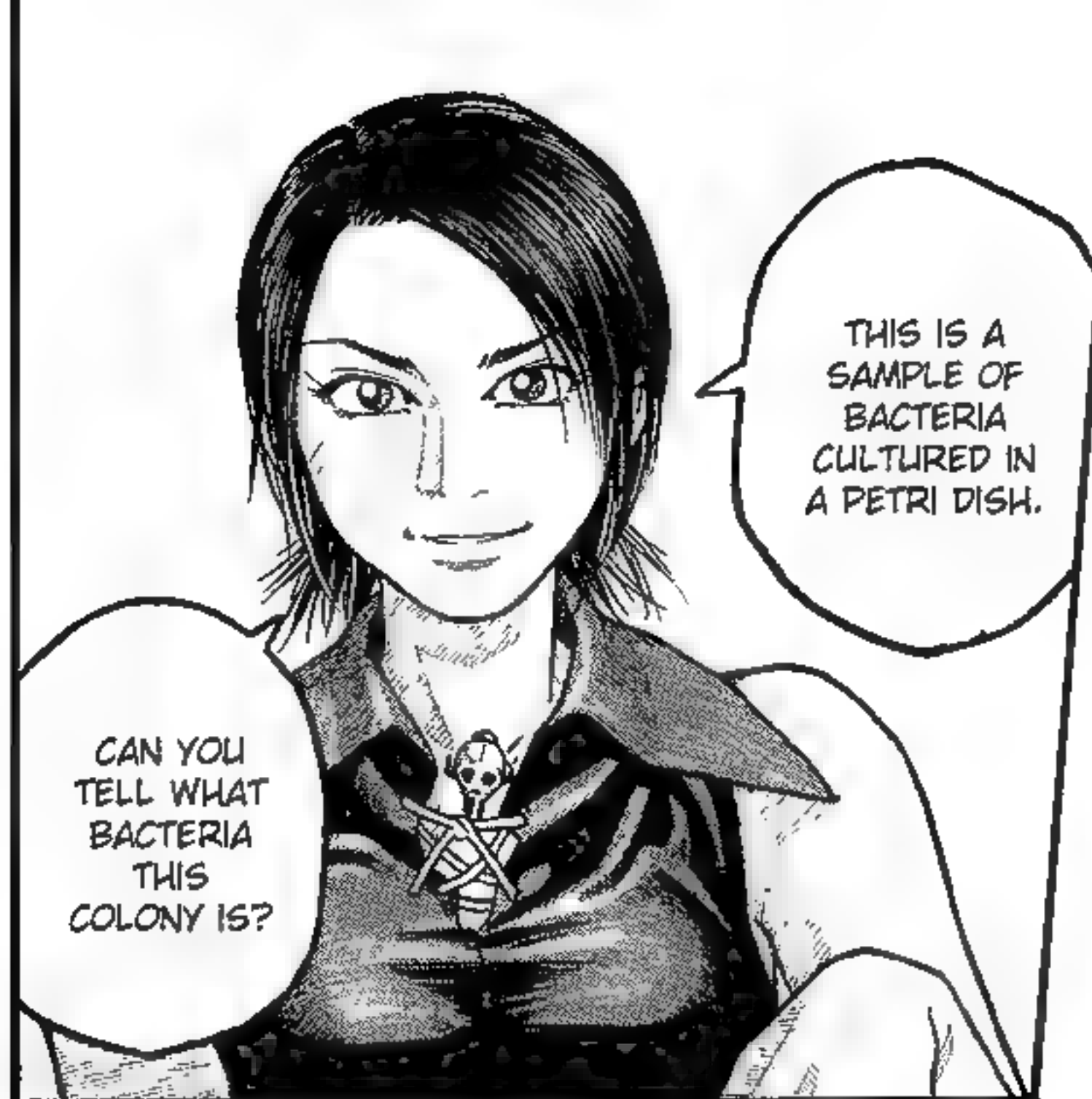
NO, IT'S
NOT LIKE
THAT.

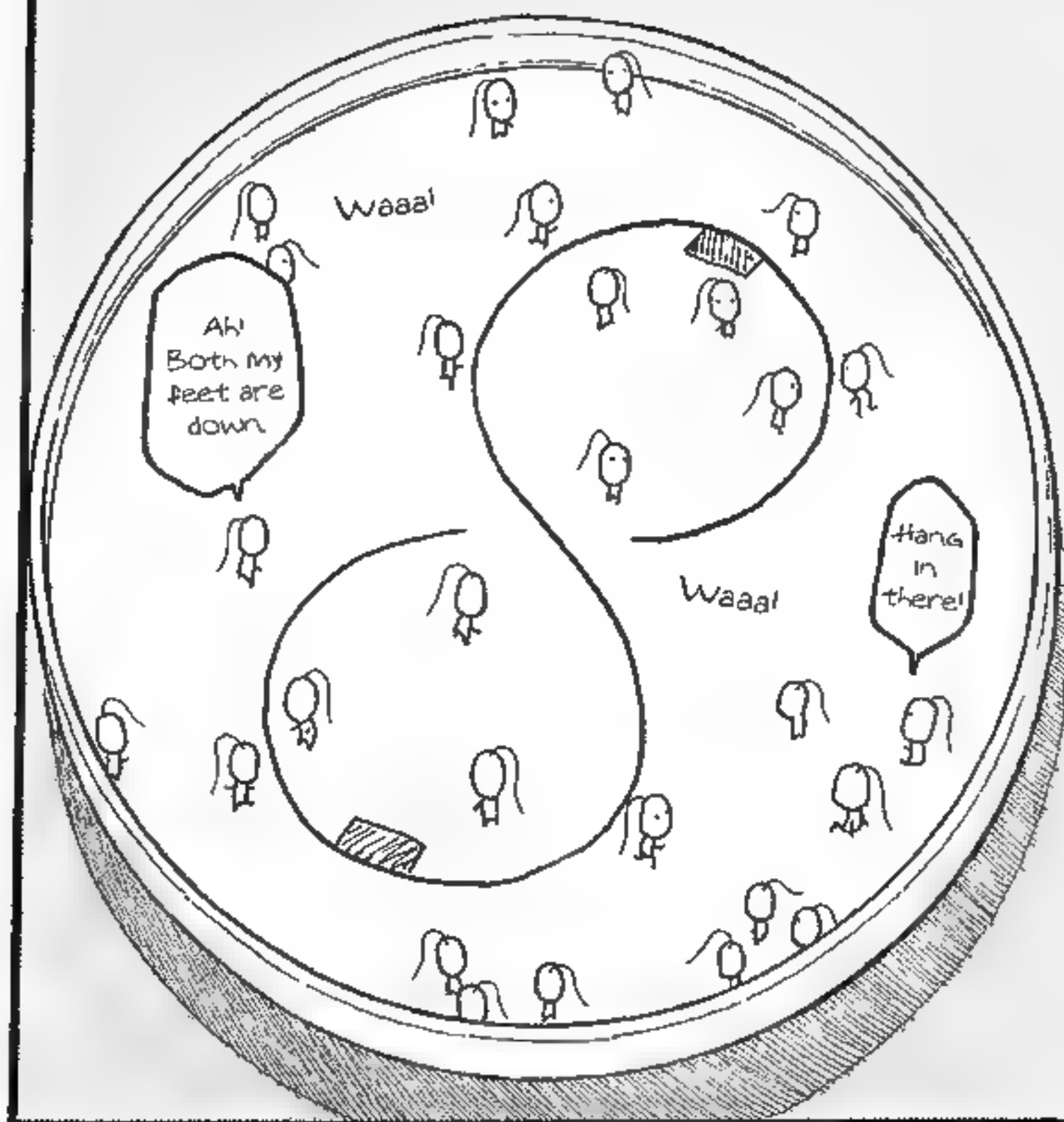
SO GOING BY
HOW IT LOOKS OR
JUST GUESSING
LIKE WITH THE
PROFESSOR'S
QUESTIONS ISN'T
GONNA WORK.

Oh!

Ohh!

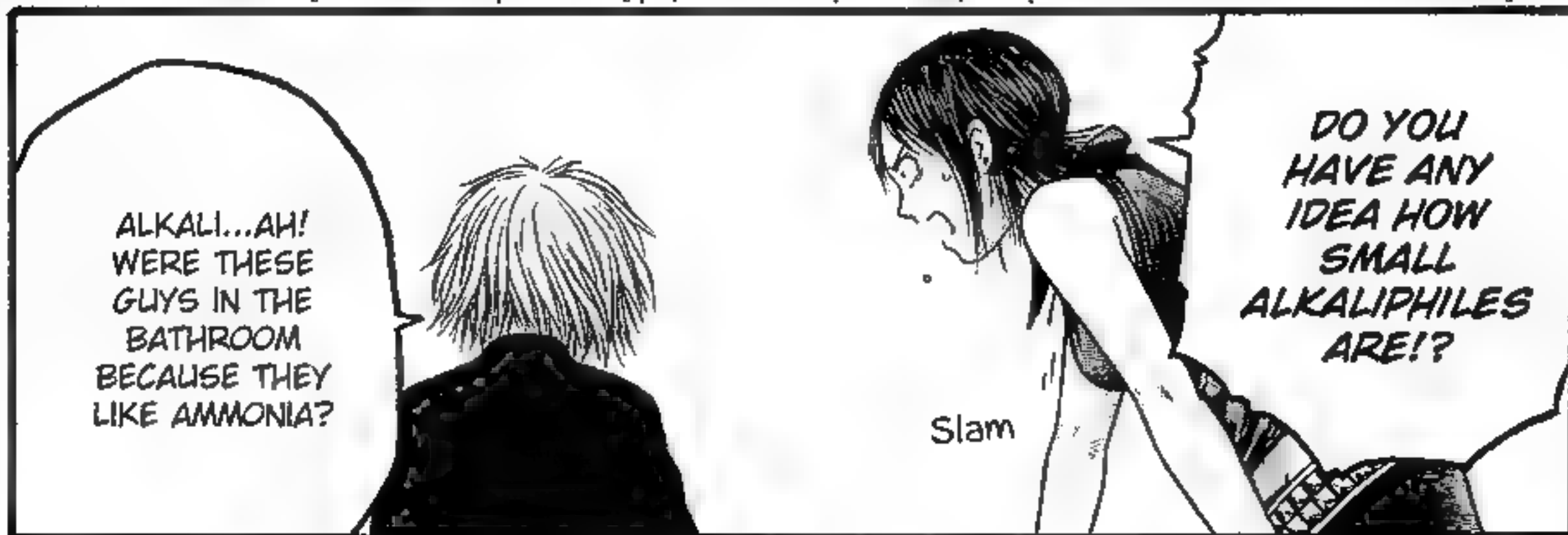
Ohhhh!

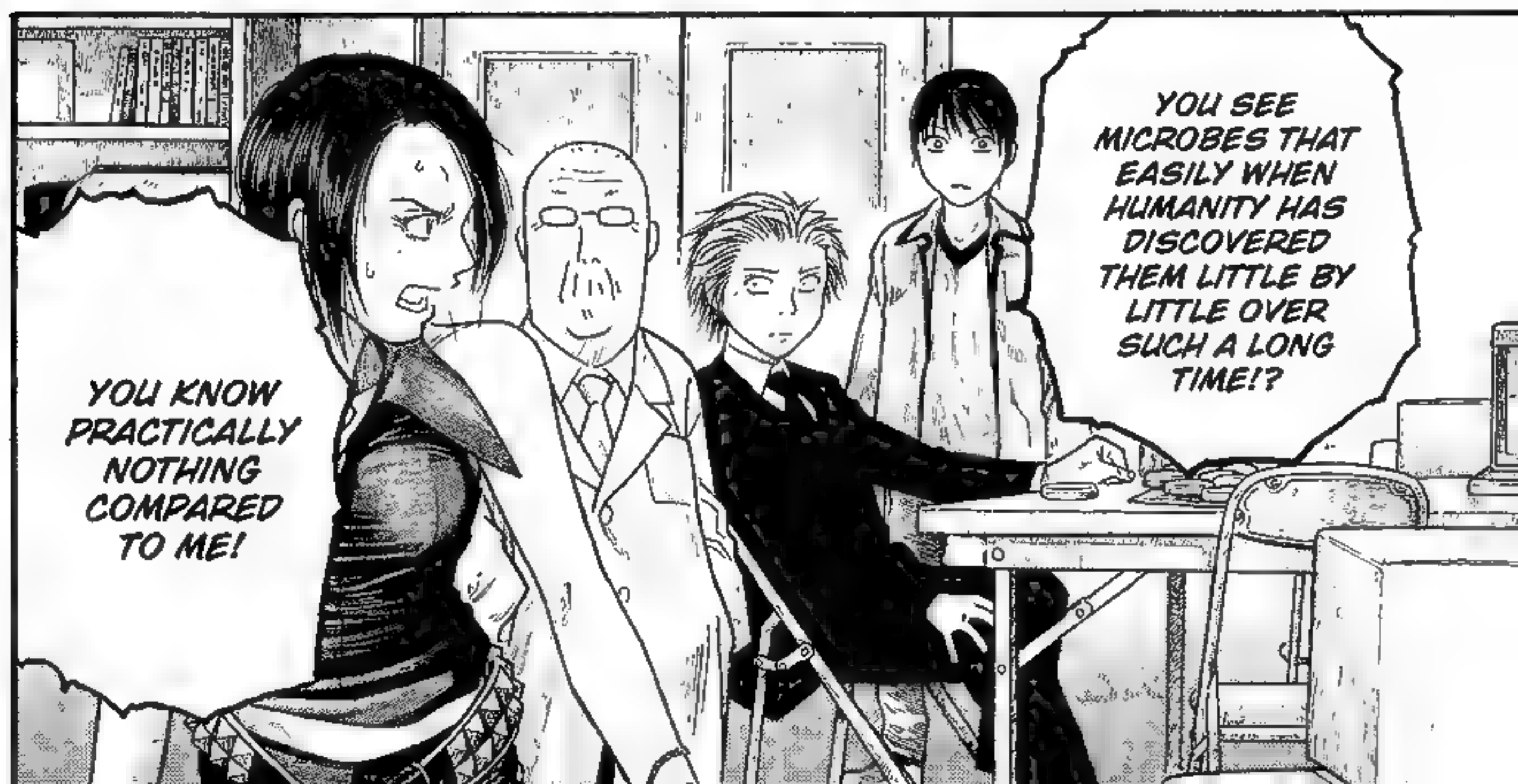


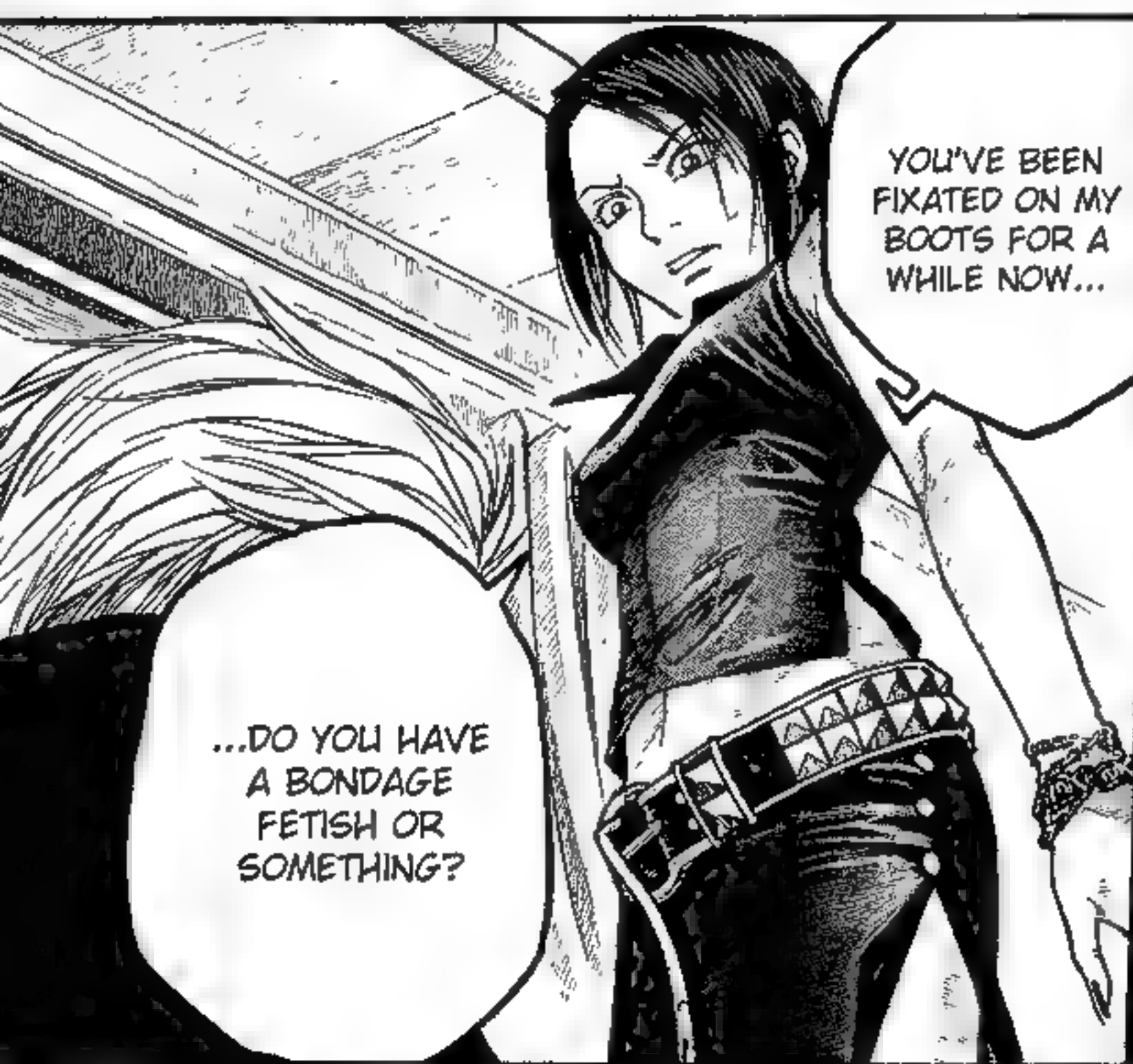
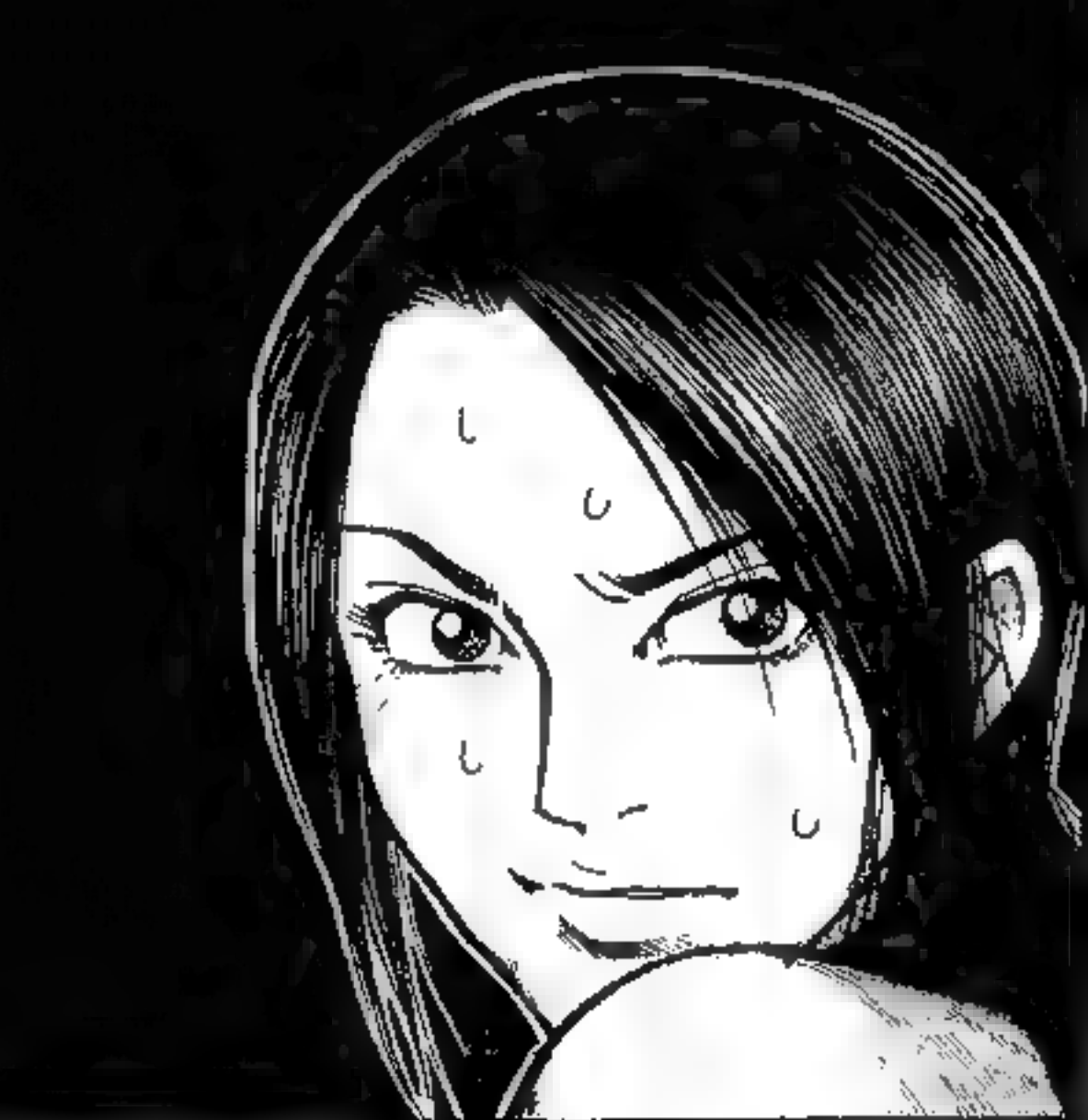


TL note: S-ken is a children's game similar to capture the flag played on an S-shaped field. Players hop on one foot and are out if both feet touch the ground.

Bacillus
halodurans
It wants
to dissolve
anything.









Will I get my own room?

Let's Build a house for everyone here!

Waaa!

Waaa!

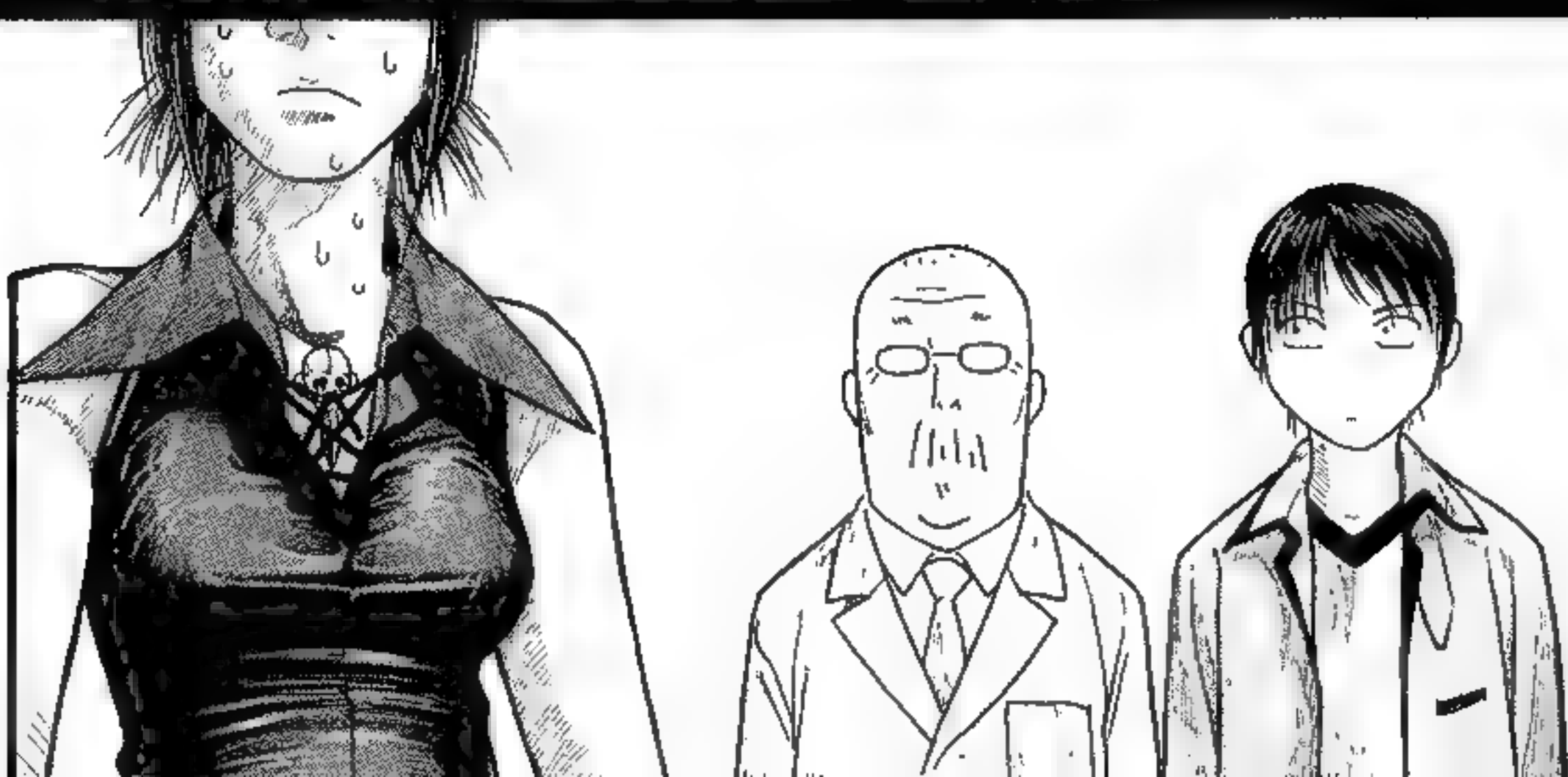
Waaa!



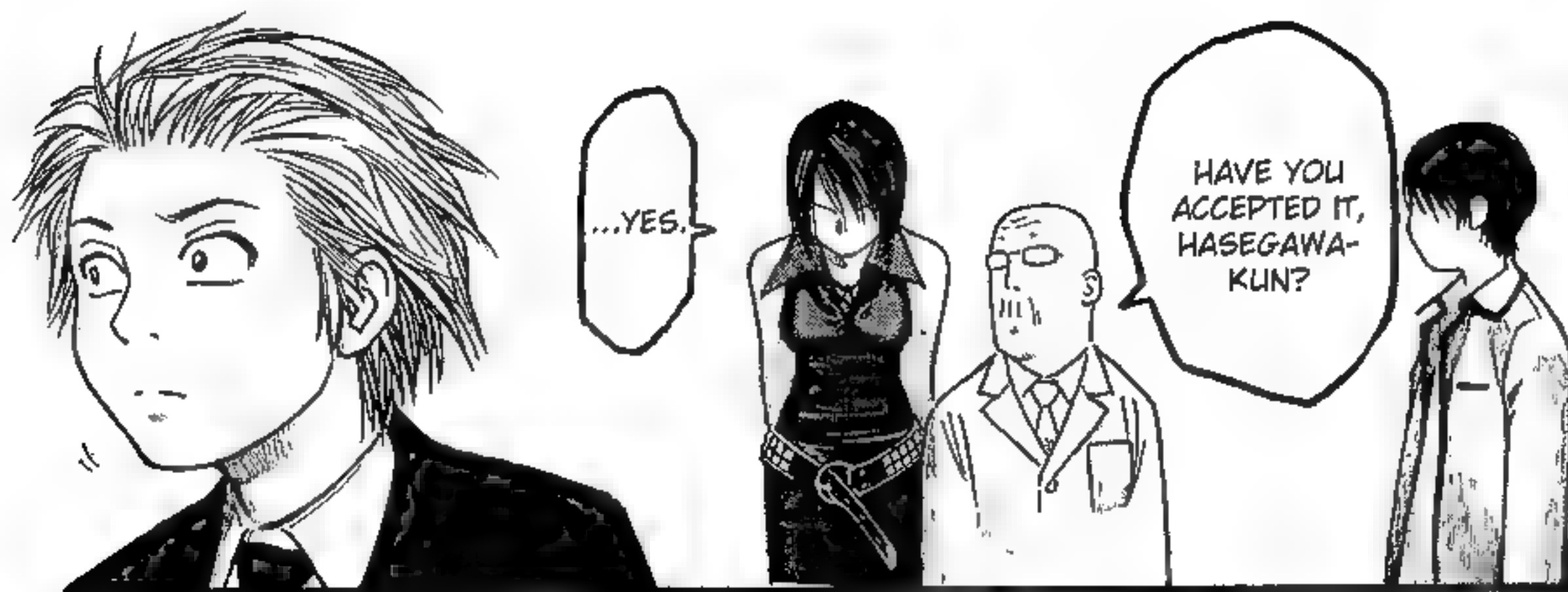
THEY JUST NEED TO BE DRY AND CLEAN, AND THEN APPLY THE CORRECT PRESCRIPTION FROM A DOCTOR...

YOU'RE STILL IN THE CLEAR, HASEGAWA-SAN.

ATHLETE'S FOOT



Trichophyton fungus
It's a type of mold (fungus)
It likes young boys and girls.





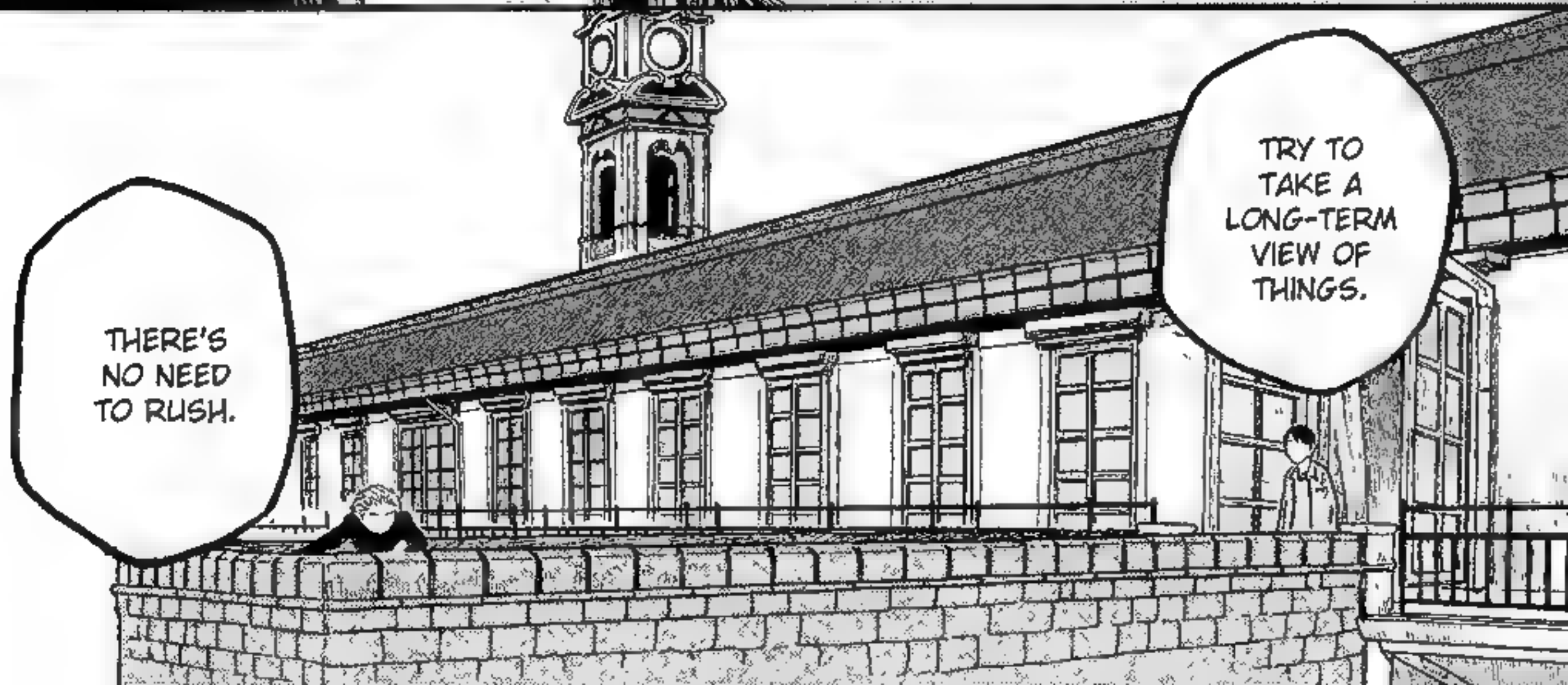
AS WITH A MOUSE,
YOU'LL GET
BETTER RESULTS
IF YOU RAISE
THEM WITH CARE.

IF YOU GET
ANGRY AT
SUCH A VALUABLE
EXPERIMENTAL
SUBJECT,
EVERYTHING
WILL GO TO
WASTE.



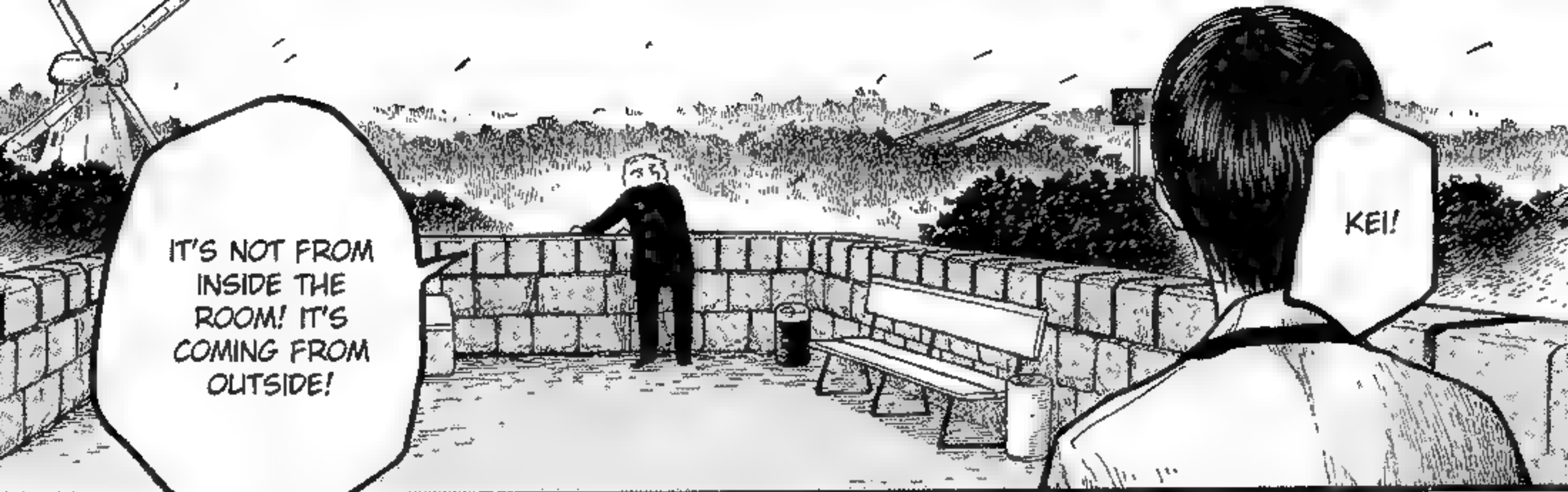
I
UNDER-
STAND...

I...



THERE'S
NO NEED
TO RUSH.

TRY TO
TAKE A
LONG-TERM
VIEW OF
THINGS.



IT'S NOT FROM
INSIDE THE
ROOM! IT'S
COMING FROM
OUTSIDE!

KEI!



IT'S BEEN
BOTHERING
ME FOR A
WHILE NOW.

THERE ARE SO
MANY HIOCHI
FLOATING
AROUND HERE.



DO YOU
KNOW
WHERE
THEY'RE
COMING
FROM,
SAWAKI?

HEY...

TAKE A
LOOK AT
THIS...





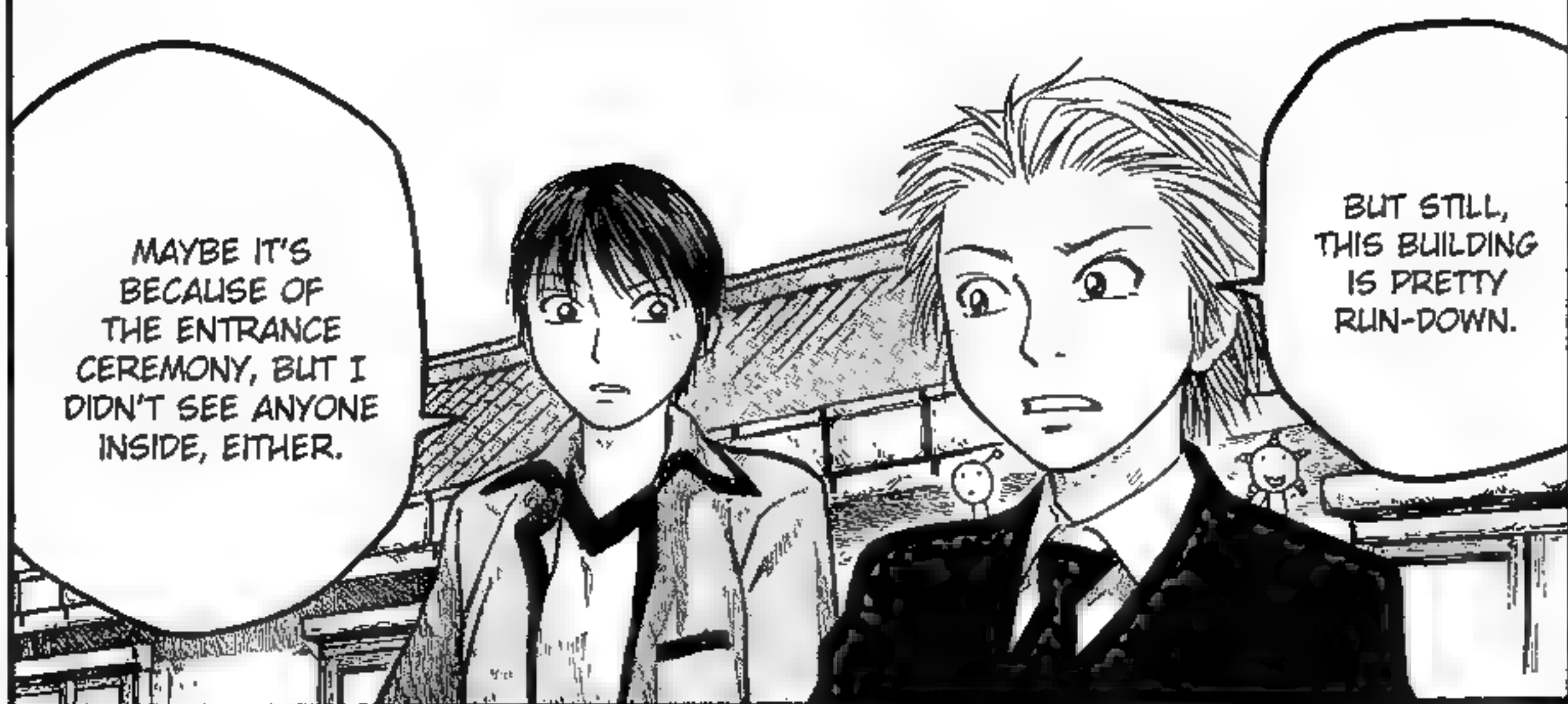
Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com



Thank you very much for the popularity of the first two chapters! Thanks for reading this chapter too!



MAYBE IT'S BECAUSE OF THE ENTRANCE CEREMONY, BUT I DIDN'T SEE ANYONE INSIDE, EITHER.

BUT STILL, THIS BUILDING IS PRETTY RUN-DOWN.



IT'S FULL OF EMPTY ROOMS, AND SOME OF THEM ON THE FIRST FLOOR ARE BEING USED FOR STORAGE.

THIS BUILDING IS SO OLD THAT IT'S ONLY BEING USED AS PROFESSOR ITSUKI'S LAB.

AGRICULTURAL SCIENCE DEPARTMENT WEST WING

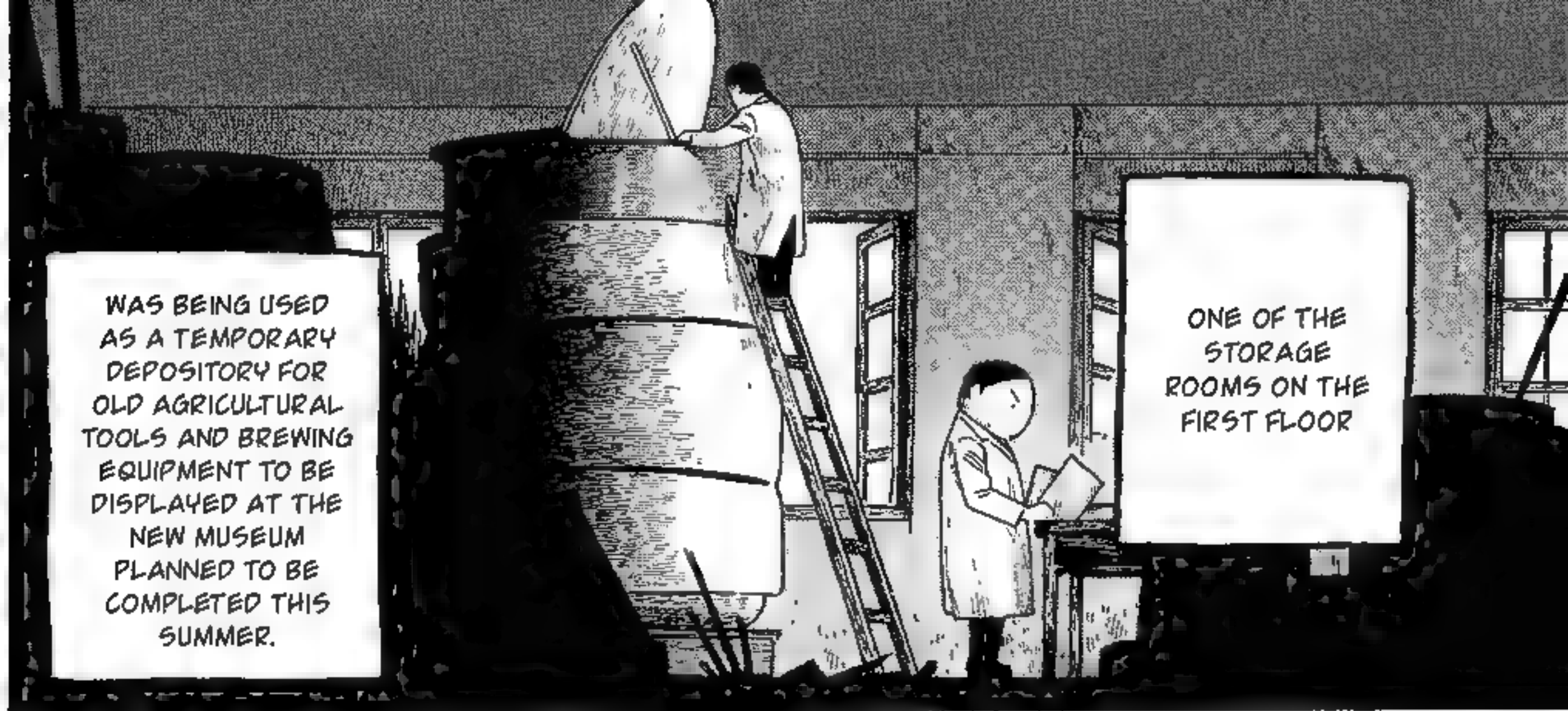


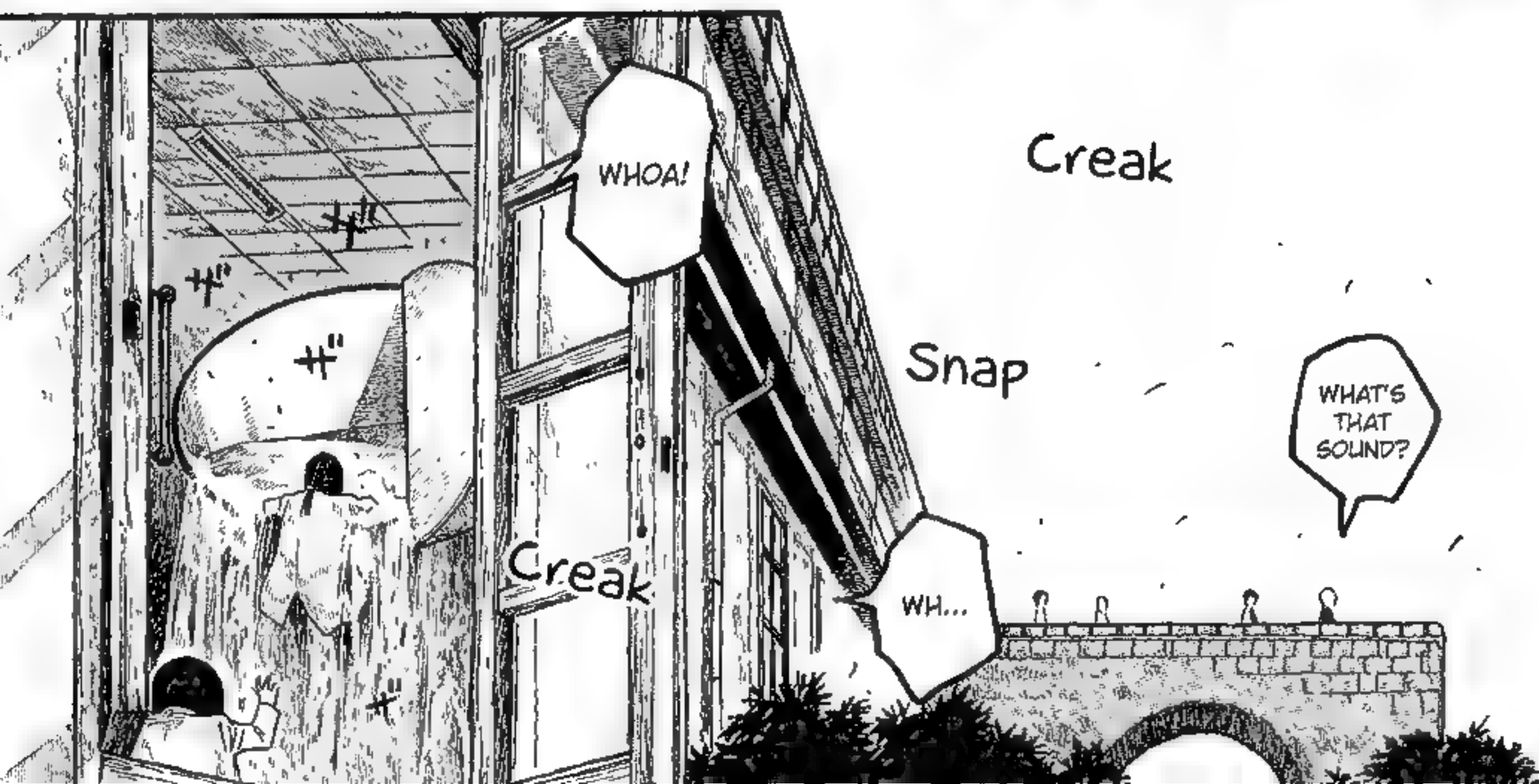
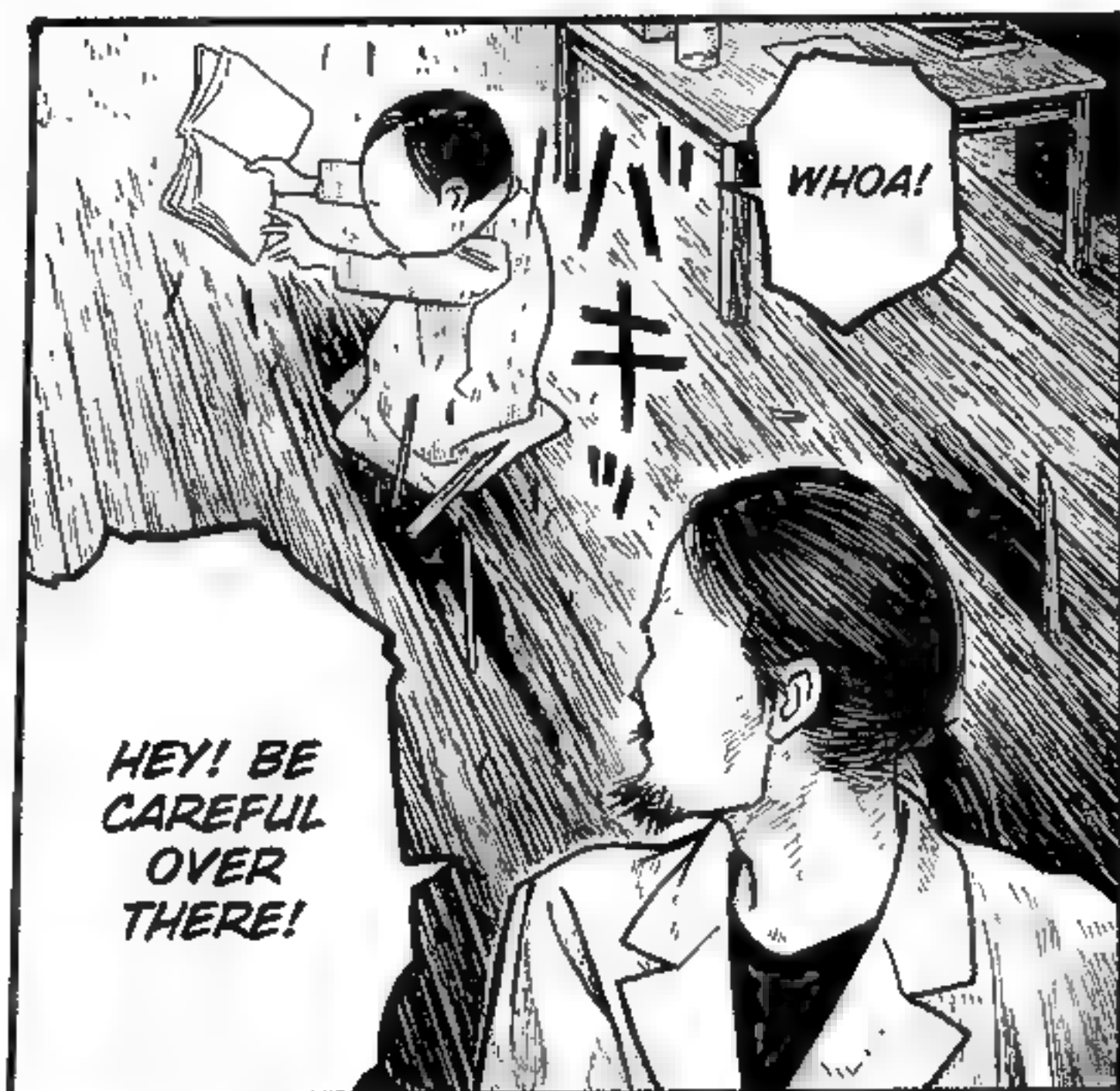
YOU MEAN THOSE SECOND-YEARS MISATO AND KAWAHAMA AGAIN?

YOU'VE GOTTA BE KIDDING ME...



WELL, IT SEEMS LIKE ONE OF THOSE ROOMS IS BEING USED BY SOME STUDENTS, THOUGH.







Formerly
"Noudai Monogatari"

おやじん



CH. 3: HIOCHI



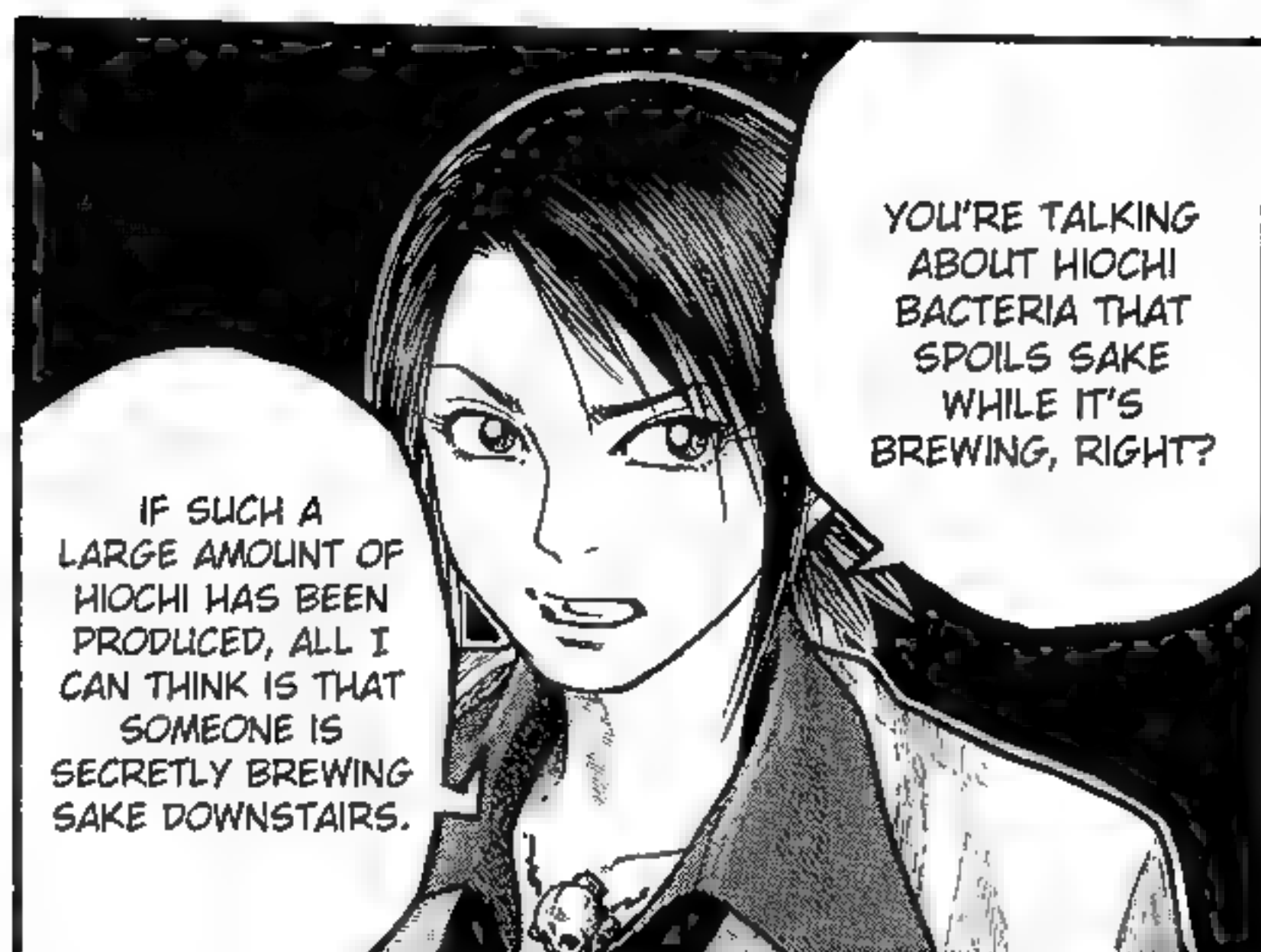
THERE
WAS AN
EXPLOSION
OF HIOCHI.

YEAH, AFTER
THAT HUGE
CRASH,



WHAT
WAS THAT
SOUND?

BUT
YOU SAW
HIOCHI BLOW
OUT OF A
WINDOW ON
THE FIRST
FLOOR,
RIGHT?



IF SUCH A
LARGE AMOUNT OF
HIOCHI HAS BEEN
PRODUCED, ALL I
CAN THINK IS THAT
SOMEONE IS
SECRETLY BREWING
SAKE DOWNSTAIRS.

YOU'RE TALKING
ABOUT HIOCHI
BACTERIA THAT
SPOILS SAKE
WHILE IT'S
BREWING, RIGHT?



WHY? YOUR
FAMILY RUNS A
BREWERY, SO
YOU DON'T WANT
TO SEE IT,
RIGHT?

LET'S
HURRY,
SAWAKI!

WITH SO MUCH
HIOCHI BACTERIA
PRODUCED, IT'LL
ADVERSELY AFFECT
OTHER RESEARCH
AND EXPERIMENTS.



Tadayasu Sawaki
He's the main character. His parents run a koji mold-starter supplier. For some reason, he can see microbes.



I READ ABOUT THE SPOILAGE OF THE YULKI BREWERY IN THE NEWSPAPER, TOO.

IT HAD TO DO WITH THE CHIEF BREWER WHO RELIED ON HIS EXPERIENCE INSTEAD OF TAKING ANY CULTURE MEDIUM SAMPLES.



L. fructivorans

Also known as "hiochi bacter a", it will come by if you leave a bottle of sake open in your house. Eh heh heh!♥



A. oryzae
It thinks it can do pretty much anything by itself



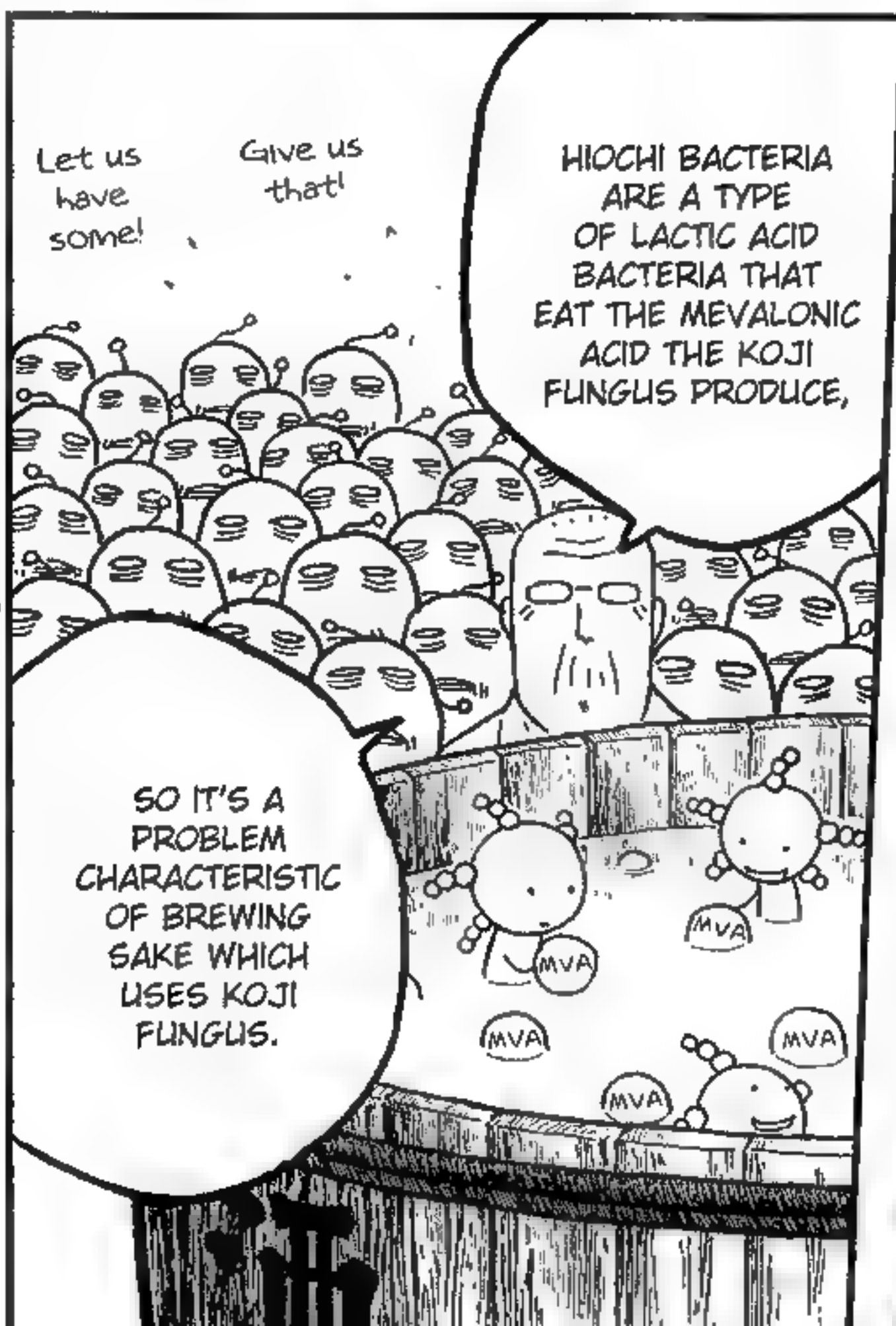
WHEN HIOCHI GOT INTO OUR STOREHOUSE...?

DO YOU REMEMBER...



THAT WAS THE FIRST TIME I EVER SAW HIOCHI, AFTER ALL.

YEAH...



Let us have some!

Give us that!

HIOCHI BACTERIA ARE A TYPE OF LACTIC ACID BACTERIA THAT EAT THE MEVALONIC ACID THE KOJI FUNGUS PRODUCE,

SO IT'S A PROBLEM CHARACTERISTIC OF BREWING SAKE WHICH USES KOJI FUNGUS.



Hiochi bacteria
Discovered by R.W. Atkinson in 1881.

FOR A SMALL BREWERY LIKE OURS, HIOCHI CAN BE FATAL.

IT ACTUALLY TOOK A LONG TIME FOR US TO GET RID OF THAT HUMILIATING "SPOILED YULKI" LABEL.



WE HAVE THE KNOWLEDGE OF OUR ANCESTORS WHO POURED THEIR HEART INTO PRESERVING SAKE, BUT EVEN SO, SAKE IS PRONE TO SPOILING.

AMONG LIQUOR, SAKE HAS THE HIGHEST ALCOHOLIC CONTENT BY FAR.*

* Sake has an alcoholic content of around 20%. Beer has about 5%, and wine has less than 15%.



BUT INSTEAD OF JUST DEFENDING AGAINST IT, I WANT TO FIND A WAY TO COMPLETELY REPEL IT.

YOU'RE RIGHT. WITH IMPROVED TECHNIQUES ADDED TO THE KNOWLEDGE OF OUR ANCESTORS AS WELL AS CONSISTENT MANAGEMENT, IT'S POSSIBLE TO PROTECT AGAINST HIOCHI.



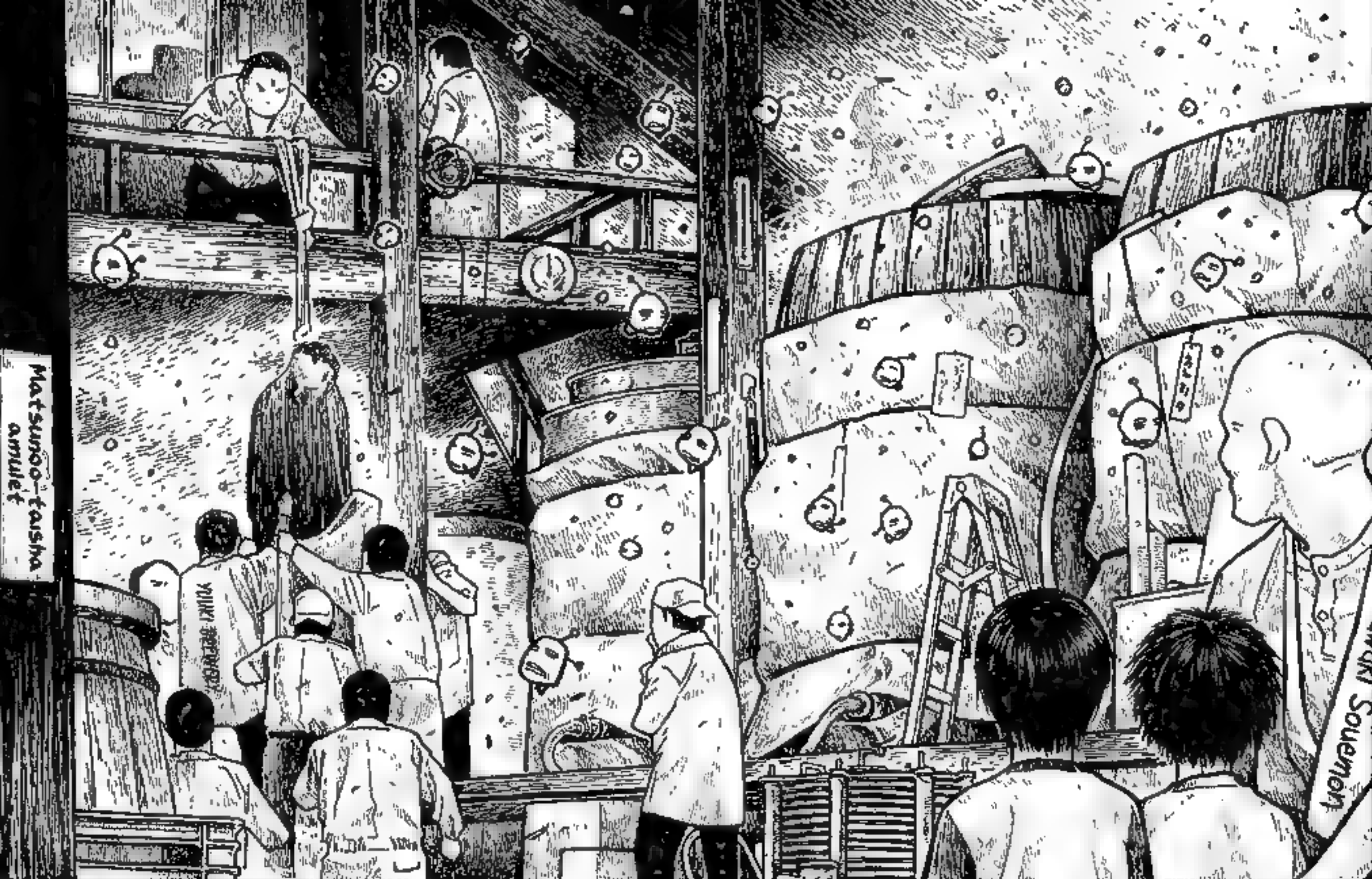
TADAYASU... KEI...COME OUTSIDE WITH ME.

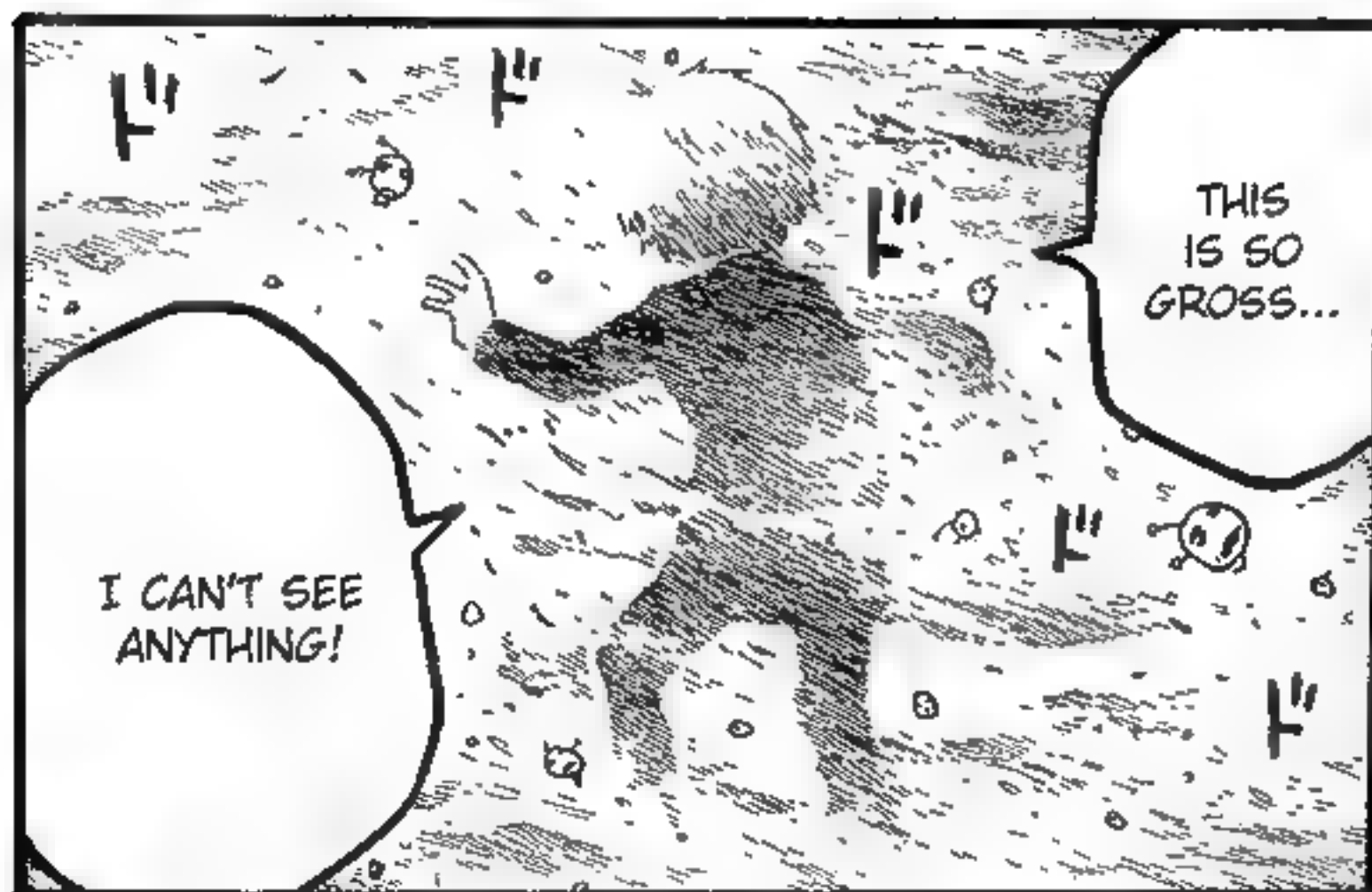
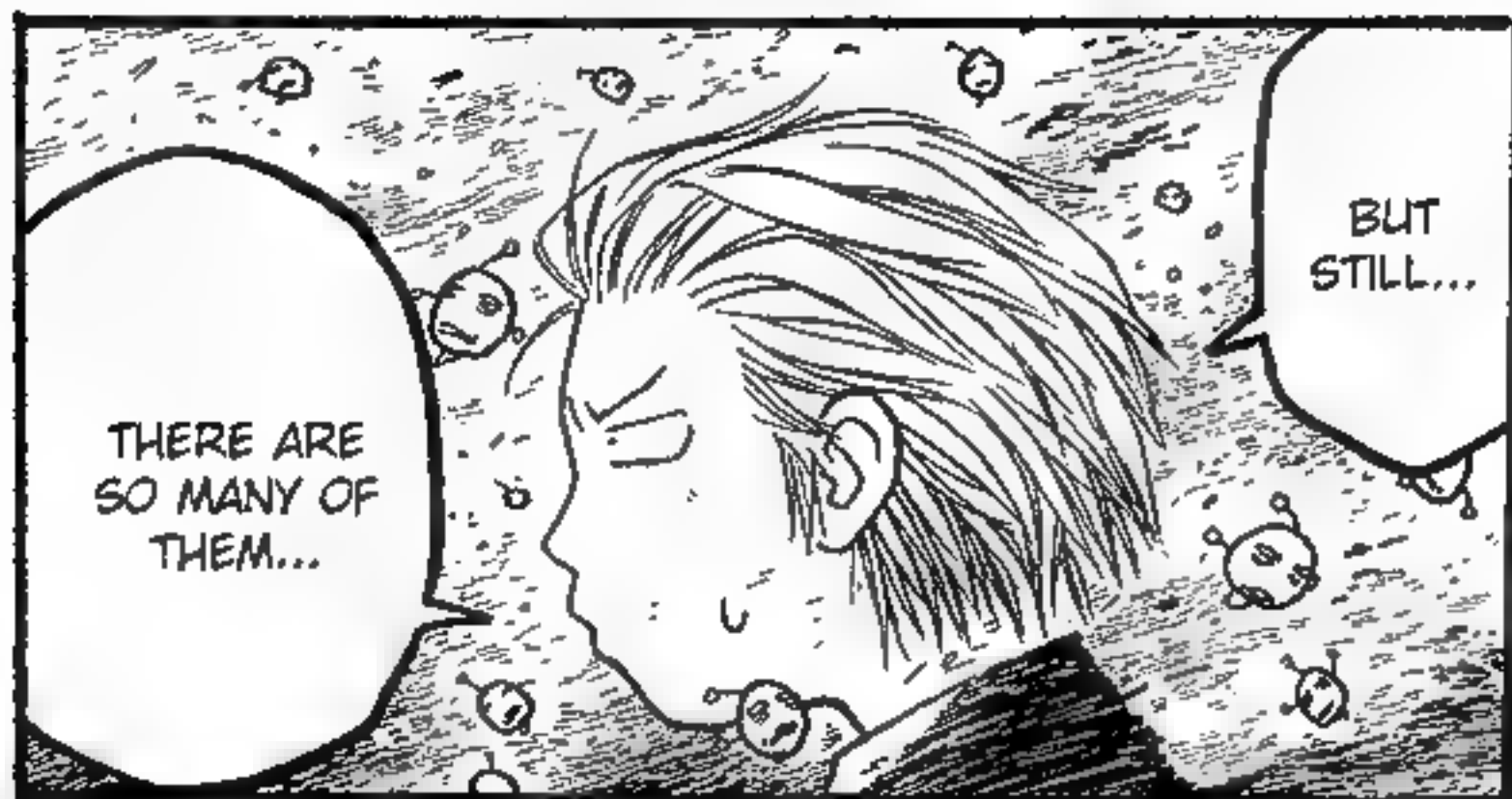
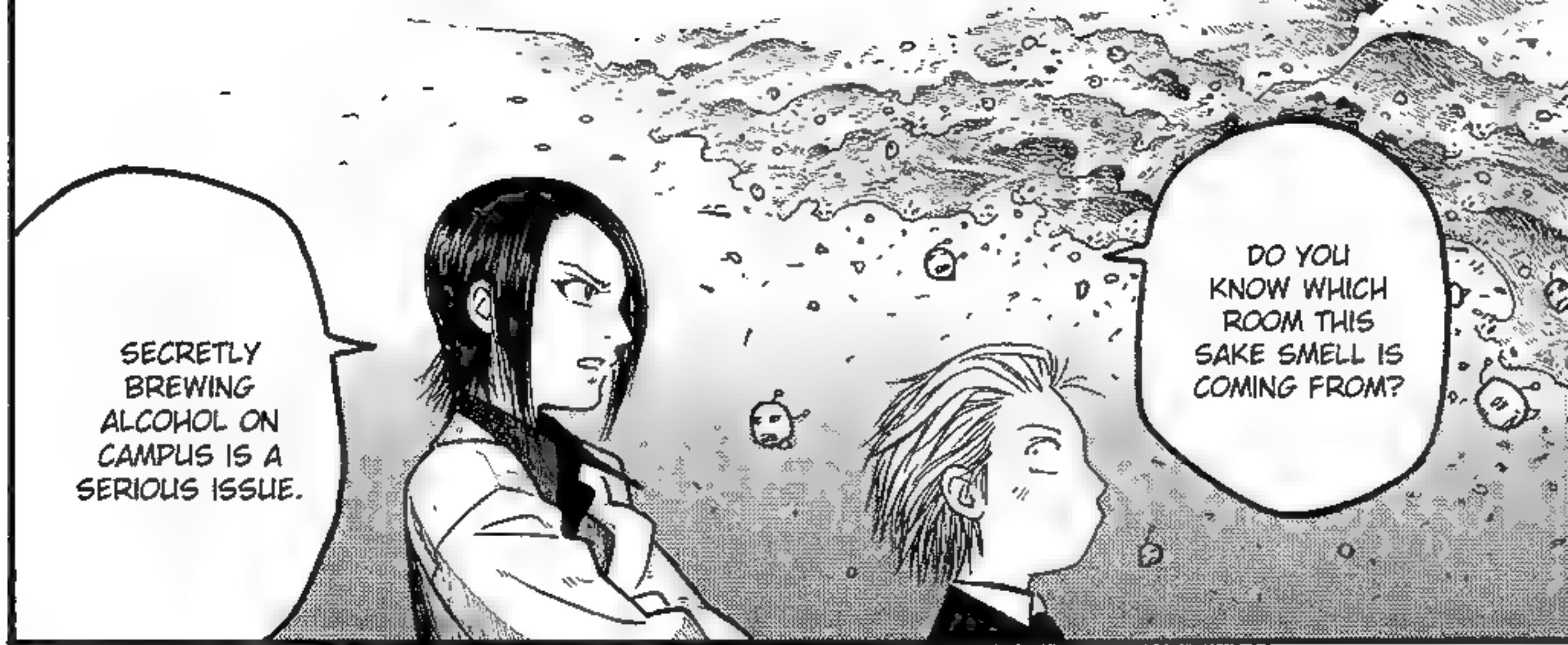
I-I GUESS ALL OF THE VATS GOT HIT WITH IT...

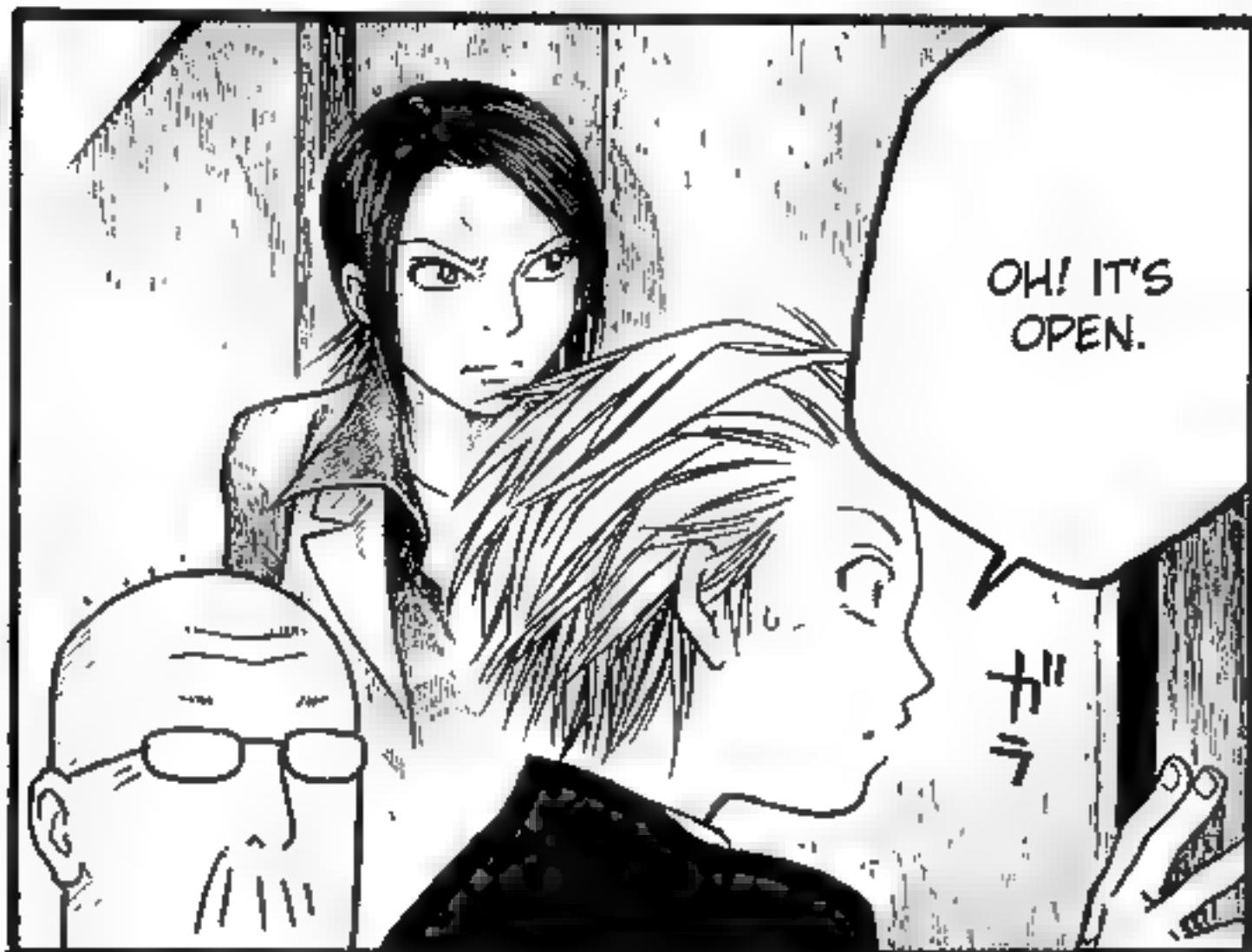
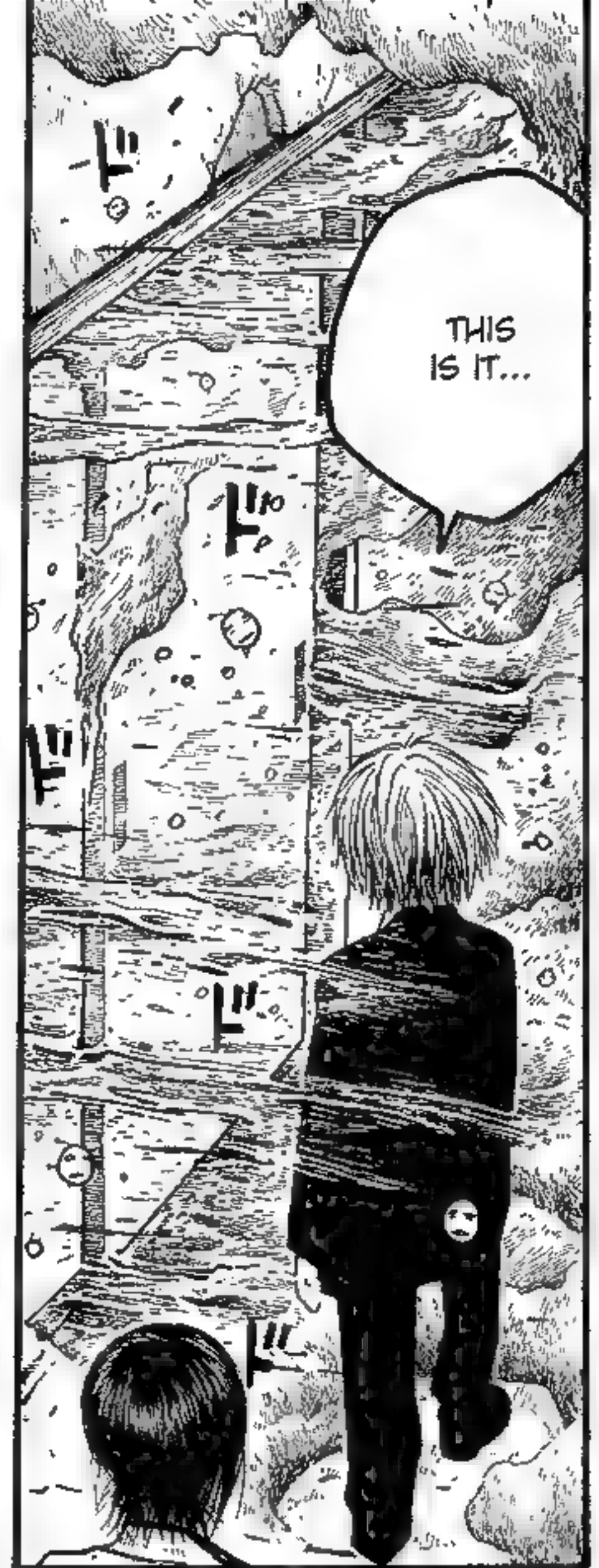


CHIEF!

YOU MORON! WHAT HAVE YOU DONE JUST FROM SOME HIOCHI...!?



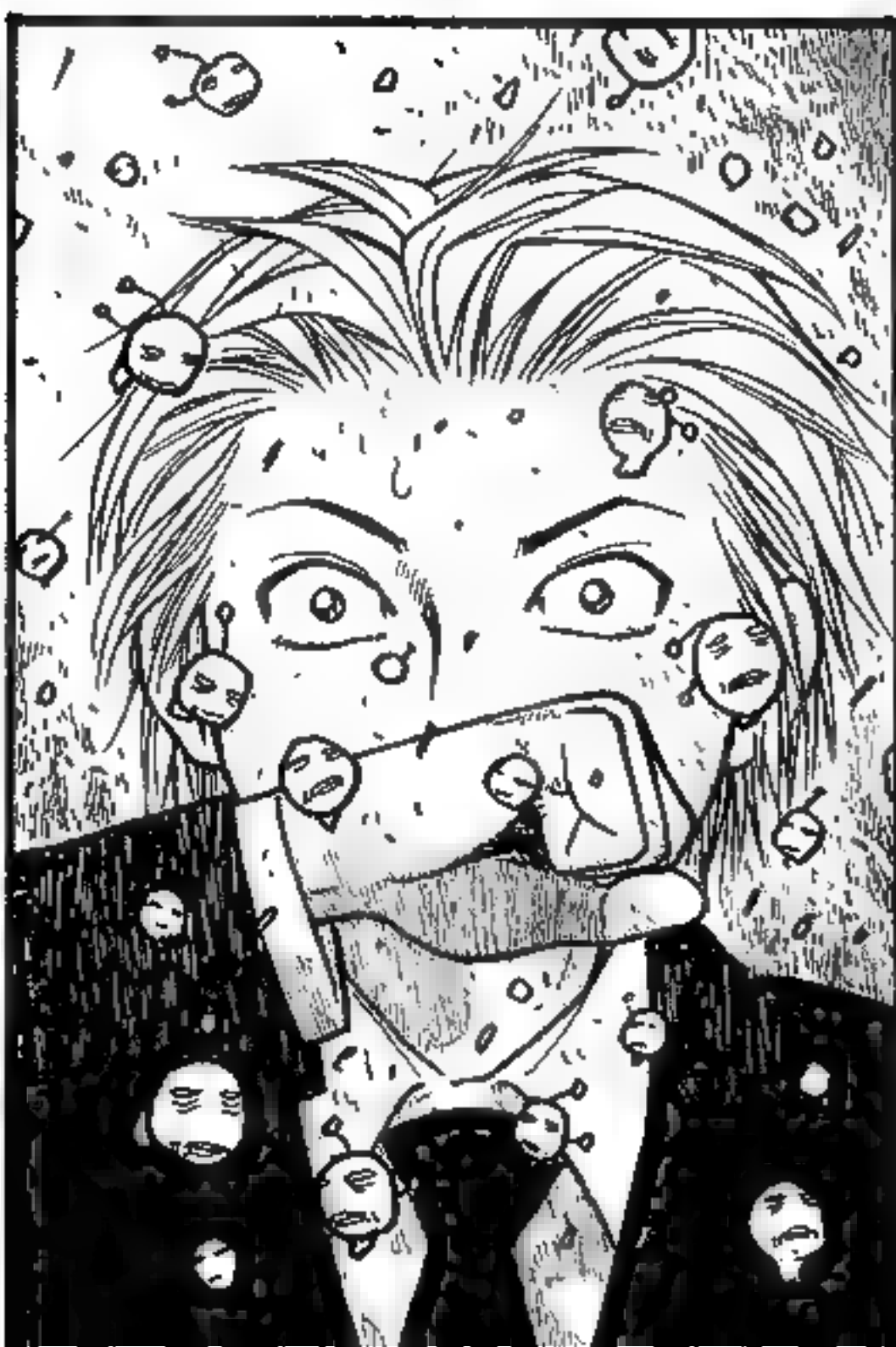




Kei Yuuki
He's been Sawak's friend since they were kids. His parents run a sake brewery.



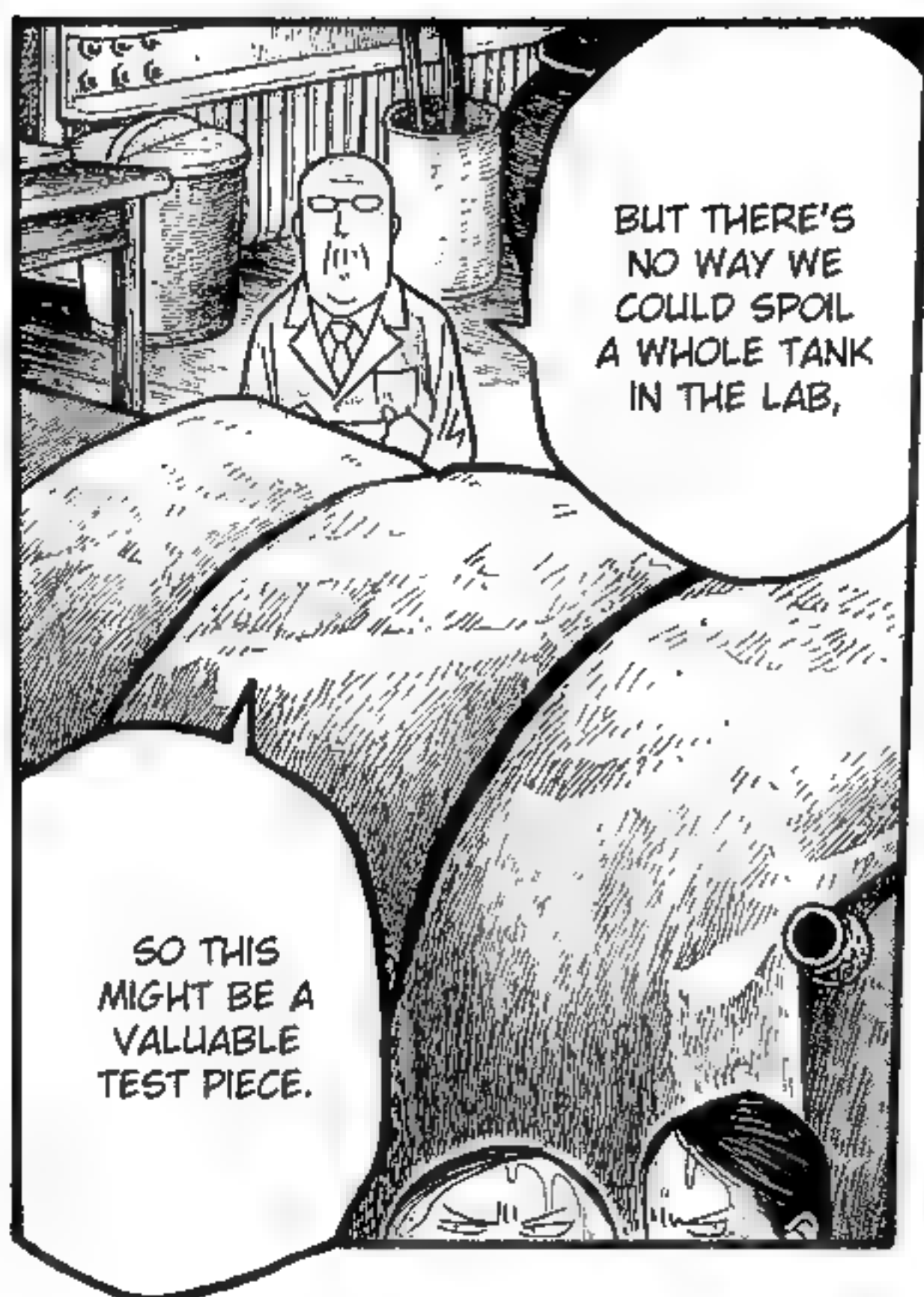
Haruka Hasegawa
She's a graduate student at a certain agricultural university. She's one of Professor Itsuki's students.





SOMEONE'S
SERIOUSLY
BEEN BREWING
IN HERE...

WHOA!
A TANK...



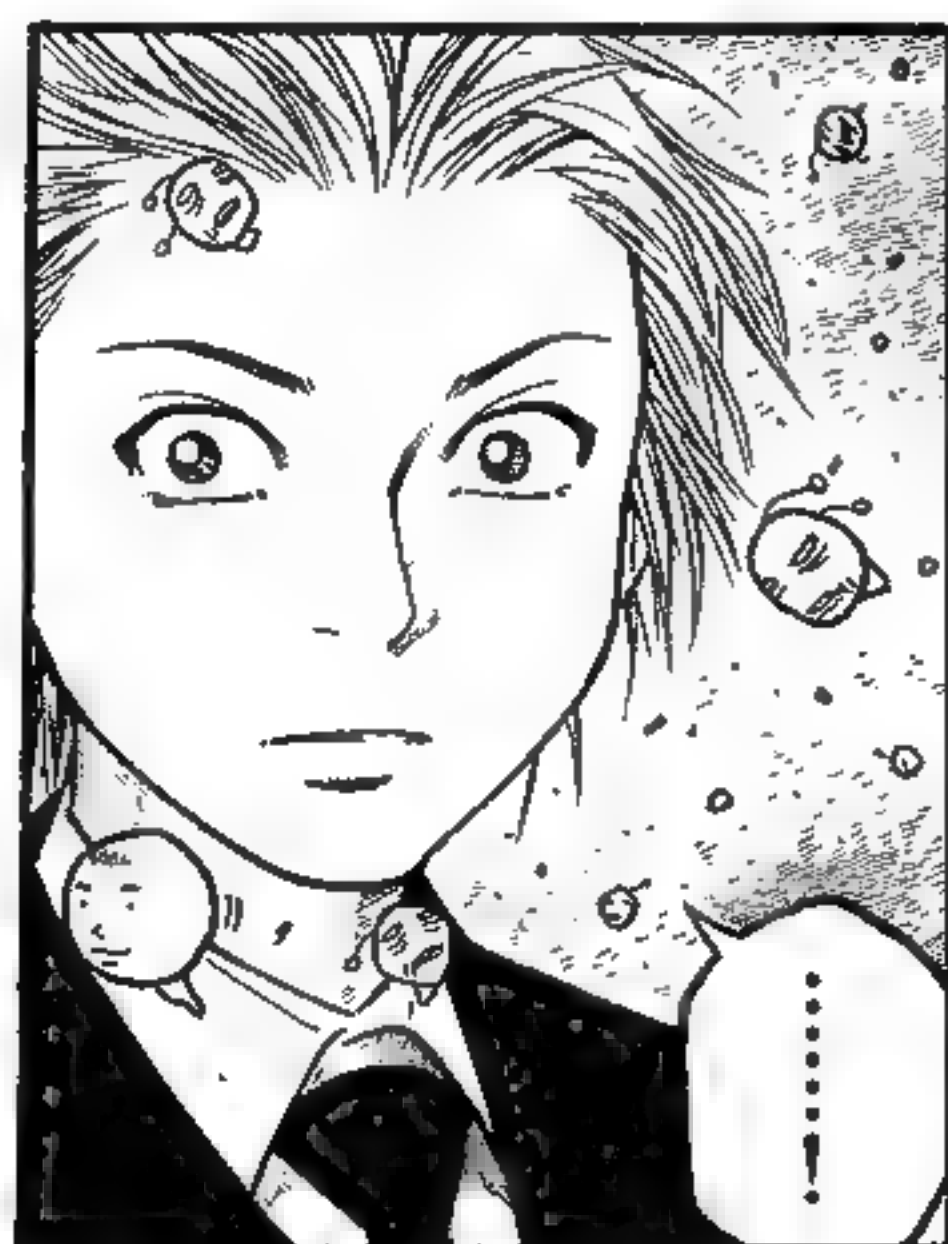
BUT THERE'S
NO WAY WE
COULD SPOIL
A WHOLE TANK
IN THE LAB,

SO THIS
MIGHT BE A
VALUABLE
TEST PIECE.



SERIOUS,
MY ASS! YOU
CAN'T MAKE
SAKE IN THIS
ENVIRONMENT.

IT LOOKS LIKE
THE ROTTEN
FLOORBOARDS
COULDN'T
SUPPORT THE
WEIGHT OF
THE TANK.





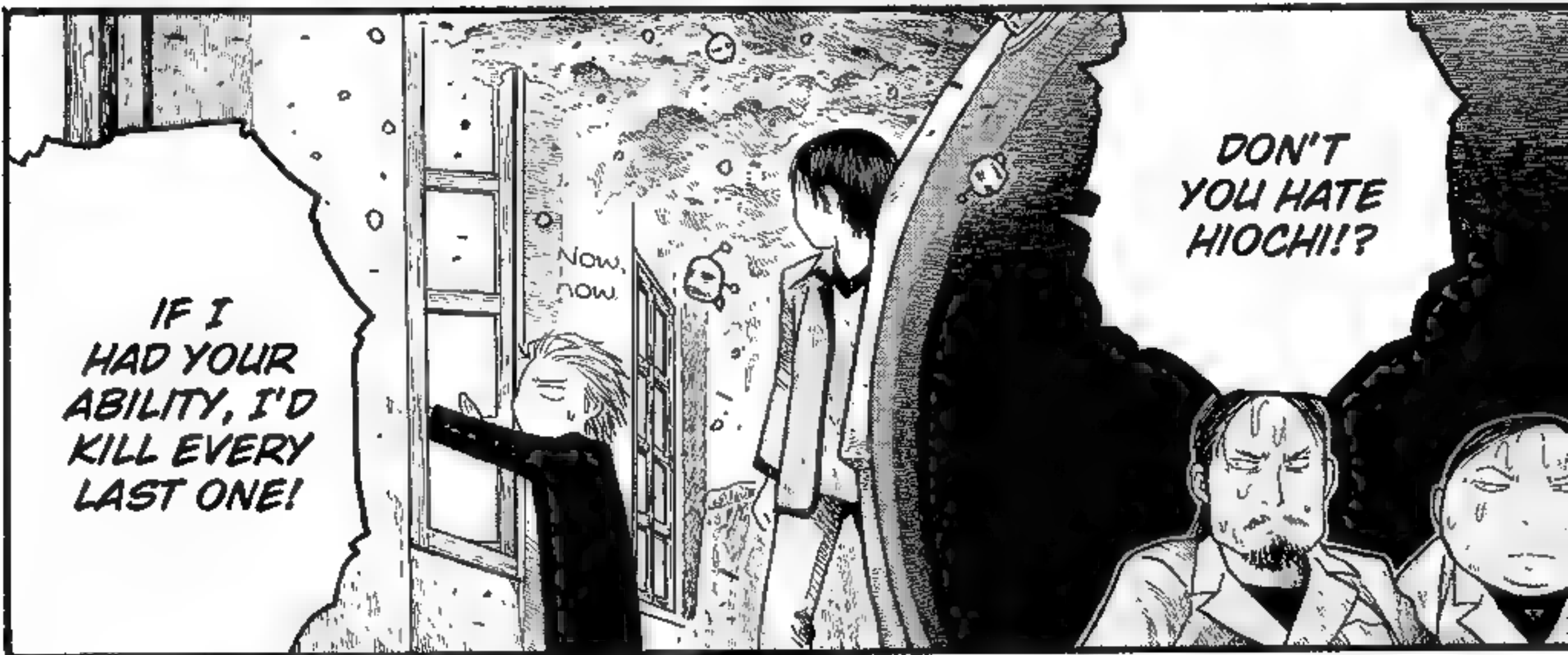
HUH!?

...THEY'LL
JUST FLY OUT
IF WE OPEN
THE WINDOWS.
YOU DON'T
HAVE TO BE
SO ANGRY.



SAWAKI!!

LET'S
BORROW A
BLOWTORCH
AND ROAST
ALL OF THE
HIOCHI!



IF I
HAD YOUR
ABILITY, I'D
KILL EVERY
LAST ONE!

Now,
now.

DON'T
YOU HATE
HIOCHI!?



Shhh

LET'S SPLASH
IT ALL OVER
THIS ROOM TO
REMOVE ALL
OF THE...

PROFESSOR!
DO YOU HAVE
SOME ETHANOL
OR SOMETHING?

Just let
it go.



THE EFFECTS OF
ASH AS BOTH A
PREVERVATIVE AND
AN ANTISEPTIC
HAVE BEEN KNOWN
IN JAPAN SINCE
ANCIENT TIMES.

ORIGINALLY,
ALKALINE WOOD ASH
WAS ADDED TO THE
ACIDIC SAKE TO
NEUTRALIZE IT
AND KILL OFF
THE HIOCHI.

YOU OFTEN
HEAR PEOPLE
SAY THAT "SAKE
WILL TURN INTO
VINEGAR", BUT
IT'S NOT REALLY
TURNING INTO
VINEGAR.

SAWAKI-KUN,
YOUR FAMILY'S
MOLD-STARTER
BUSINESS USES
ASH TO CULTIVATE
A PURE CULTURE
OF KOJI FUNGUS,
RIGHT?

SAKE INFECTED
WITH HIOCHI
BECOMES CLOUDY
AND GIVES OFF A
FOUL ODOR, SO
THAT'S WHAT
PEOPLE USED TO
SAY WHEN THEY
SAW THAT HAPPEN.

YOU COULD SAY
THAT THE USE
OF ASH WAS A
PIONEER FOR
BIOSCIENCE IN
OUR COUNTRY.

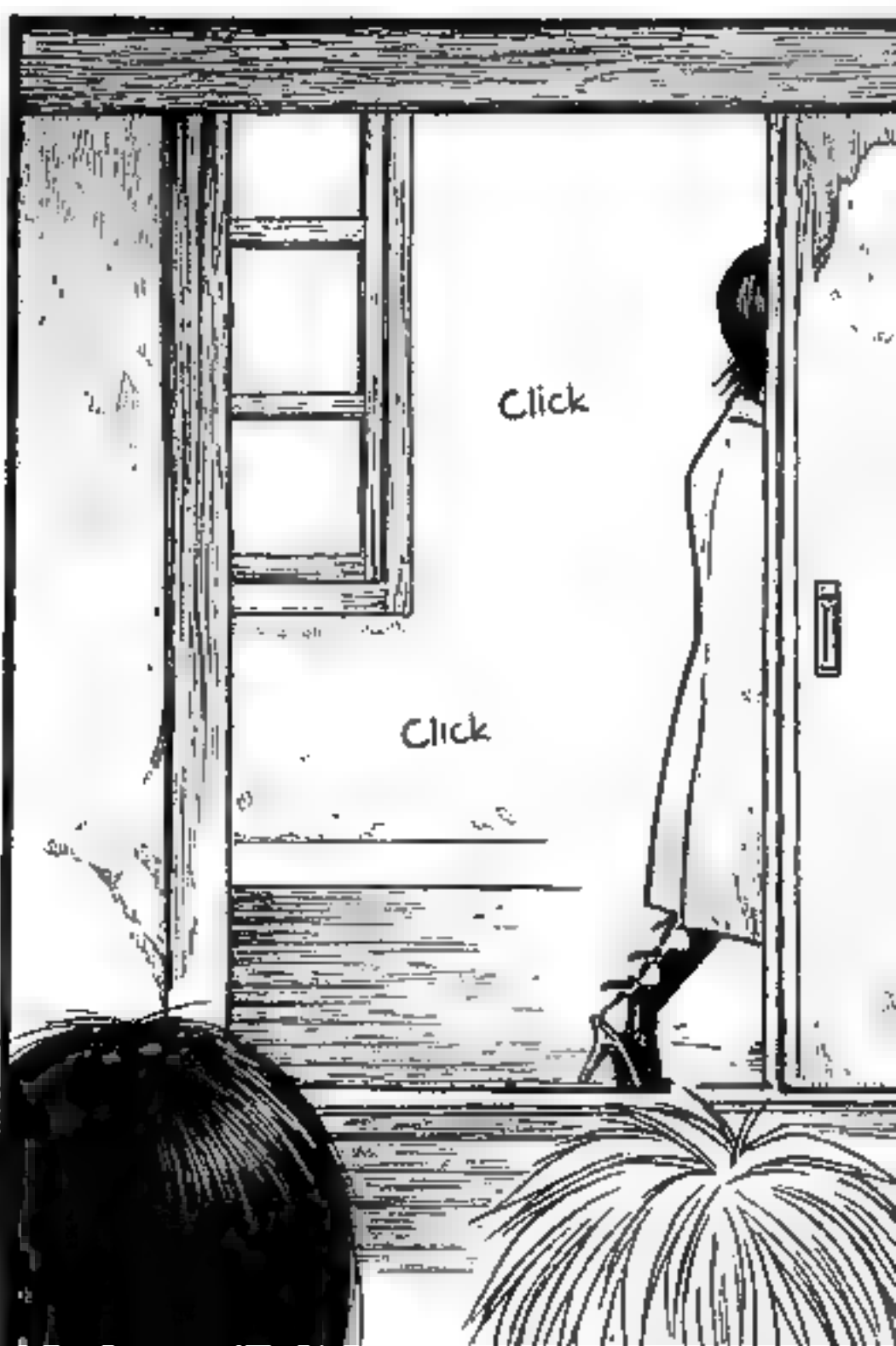
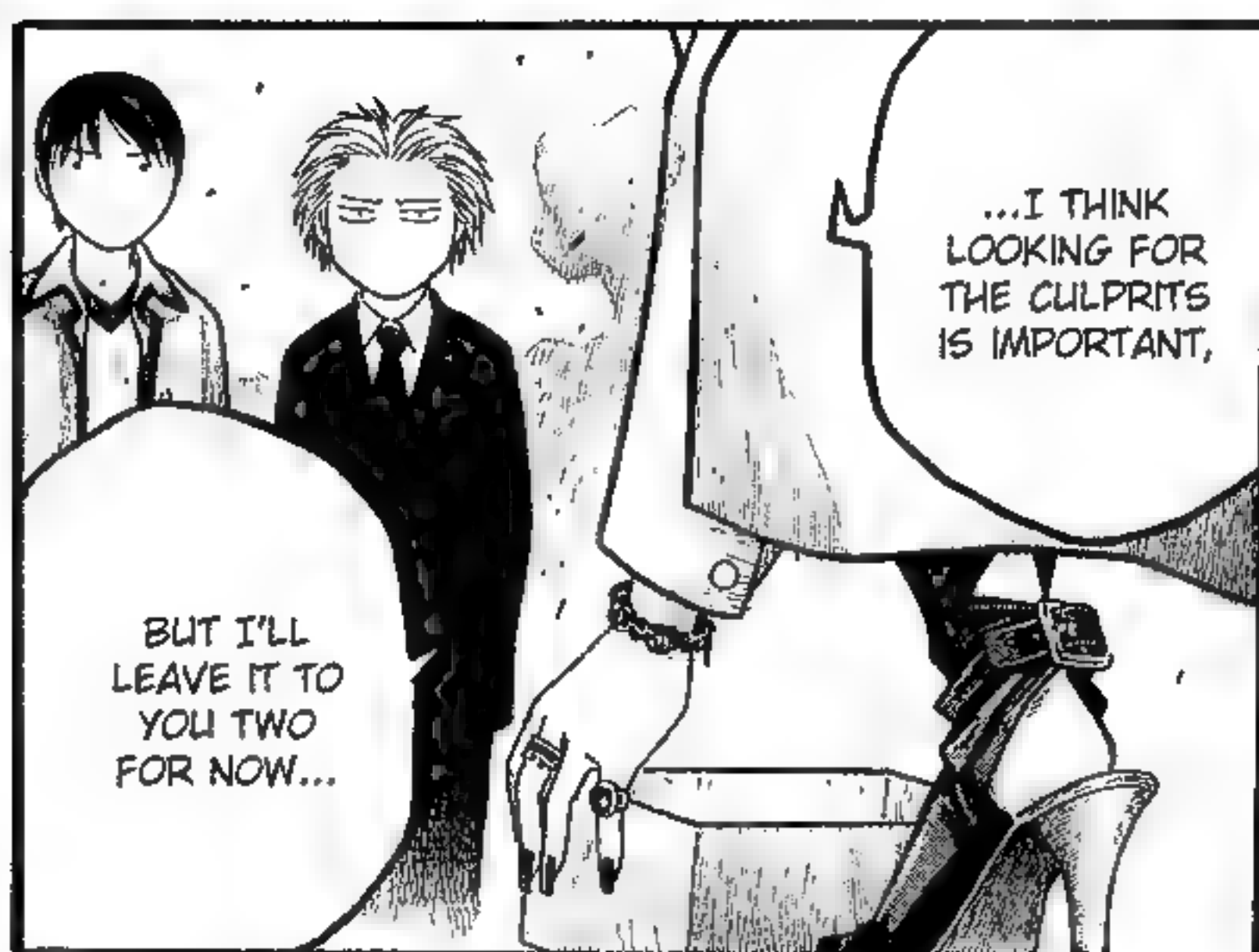
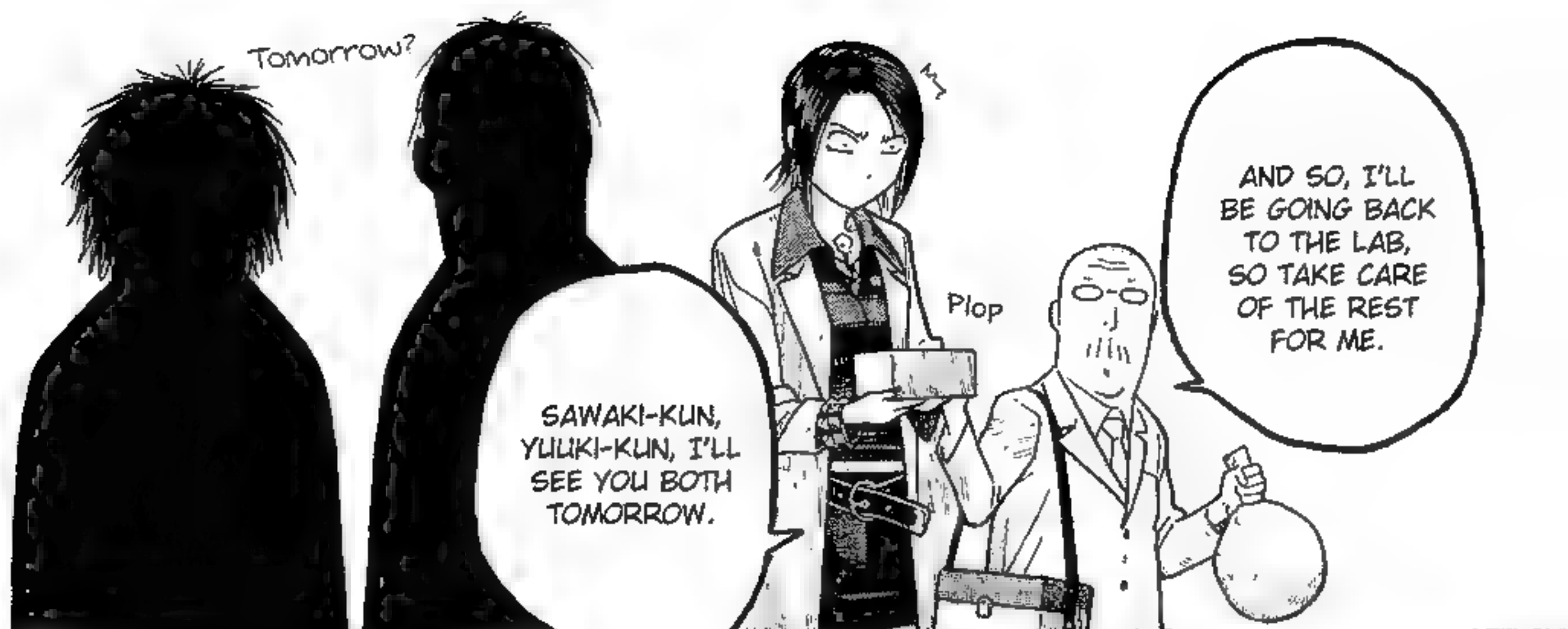
IN CONCLUSION, ALTHOUGH IT'S
NO EXAGGERATION TO SAY THAT
THERE ISN'T A WAY TO COMPLETELY
REPEL HIOCHI BACTERIA, IT'S
POSSIBLE TO PROTECT AGAINST IT.
YOU COULD SAY THAT'S ONE OF
THE MOST IMPORTANT FACTORS OF
BREWING SAKE. THAT SAID, HIOCHI
BACTERIA EXIST IN THE NATURAL
WORLD AS A TYPE OF LACTIC ACID
BACTERIA, SO ALTHOUGH IT'S
DIFFICULT TO REPEL JUST THAT,
IN RECENT YEARS, RESEARCH HAS
BEEN MOVING FORWARD IN THE
EXTRACTION OF LACTIC ACID IN AN
EFFORT TO FIND PRACTICAL USES
FOR HIOCHI BACTERIA.

NOWADAYS,
TECHNIQUES HAVE
PROGRESSED TO
THE POINT WHERE IT
CAN BE PREVENTED
EVEN WITHOUT FULLY
ELIMINATING IT, BUT THE
BATTLE AGAINST HIOCHI
OCCURS EVERY YEAR
FOR BREWERS, SO
IT'S NOT LIKE I DON'T
UNDERSTAND YOUR
FEELINGS, YUUKI-KUN.

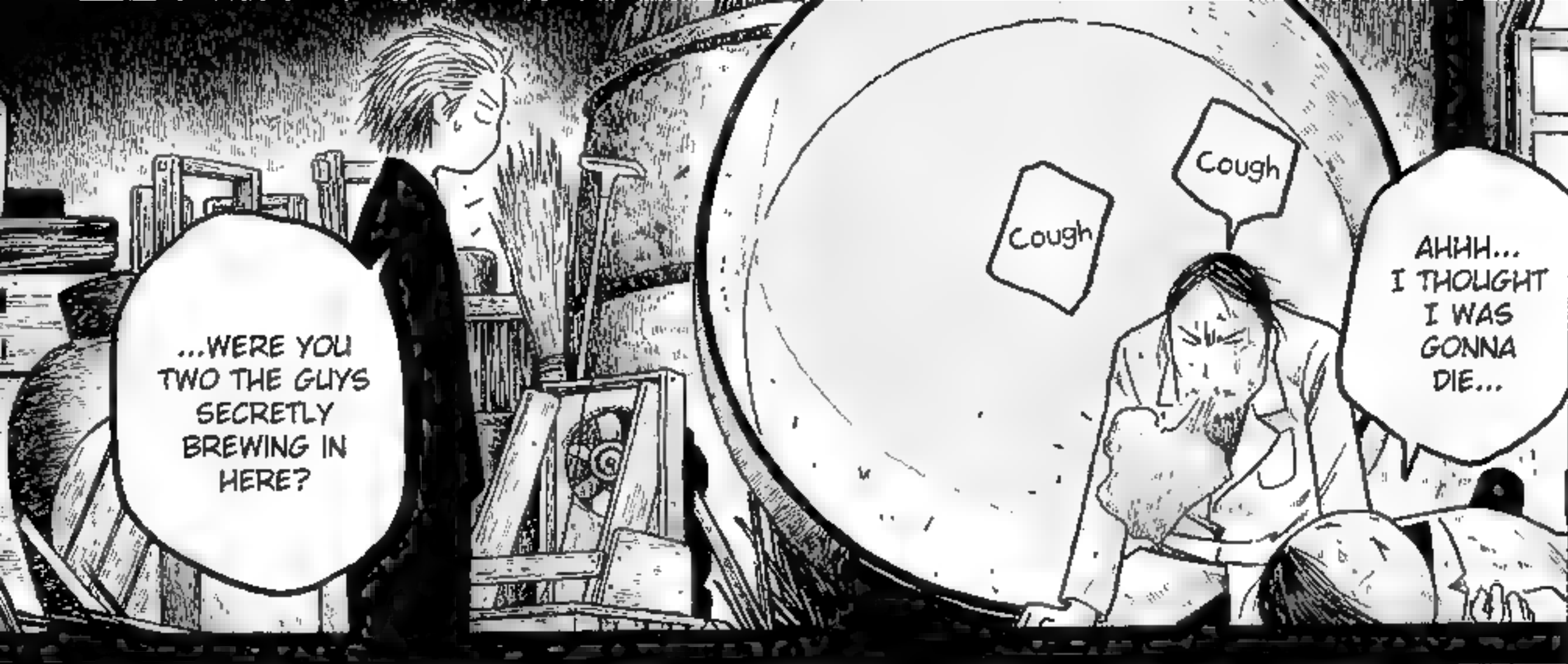
DISPOSING OF SPOILED
SAKE ON YOUR OWN IS
AGAINST THE LAW, BUT IN
RECENT YEARS, AS LONG
AS THE SPOILAGE ISN'T
SEVERE, IT'S POSSIBLE
TO FORGO DISPOSING OF
IT IN LIEU OF FILTRATION
AND SANITATION. THIS
MAKES IT POSSIBLE TO
RESTORE IT TO A LEVEL
WHERE IT COULD BE
SOLD WITHOUT ANY
PROBLEMS.



Keizou
Itsuki
He's a
professor
at a certain
agricultural
university
He's a friend
of Sawak's
grandfather







In chapter 4 next time (the title is undecided)...
a lot of things other than microbes might show up.





Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com

Thanks for the great feedback! But I guess it's a little different from last chapter's preview.

AT THE PRELIMINARY SEMINAR LAST YEAR, I THOUGHT HE WAS EAGER TO LEARN, BUT I HADN'T SEEN HIM RECENTLY.



KAORU MISATO (A SECOND-YEAR) OFTEN STARTED SHOWING UP AT MY LAB BEGINNING IN THE SUMMER OF LAST YEAR, SAYING THAT HE WAS GOING TO STUDY BREWING.

INSTEAD OF A RESEARCHER, HE PUT MORE OF A STRESS ON "ESTHETICS" AS A SCHOLAR. FROM THE STANDPOINT OF THE UNIVERSITY, I'M LOOKING FORWARD TO SEEING WHAT HE DOES IN THE FUTURE.



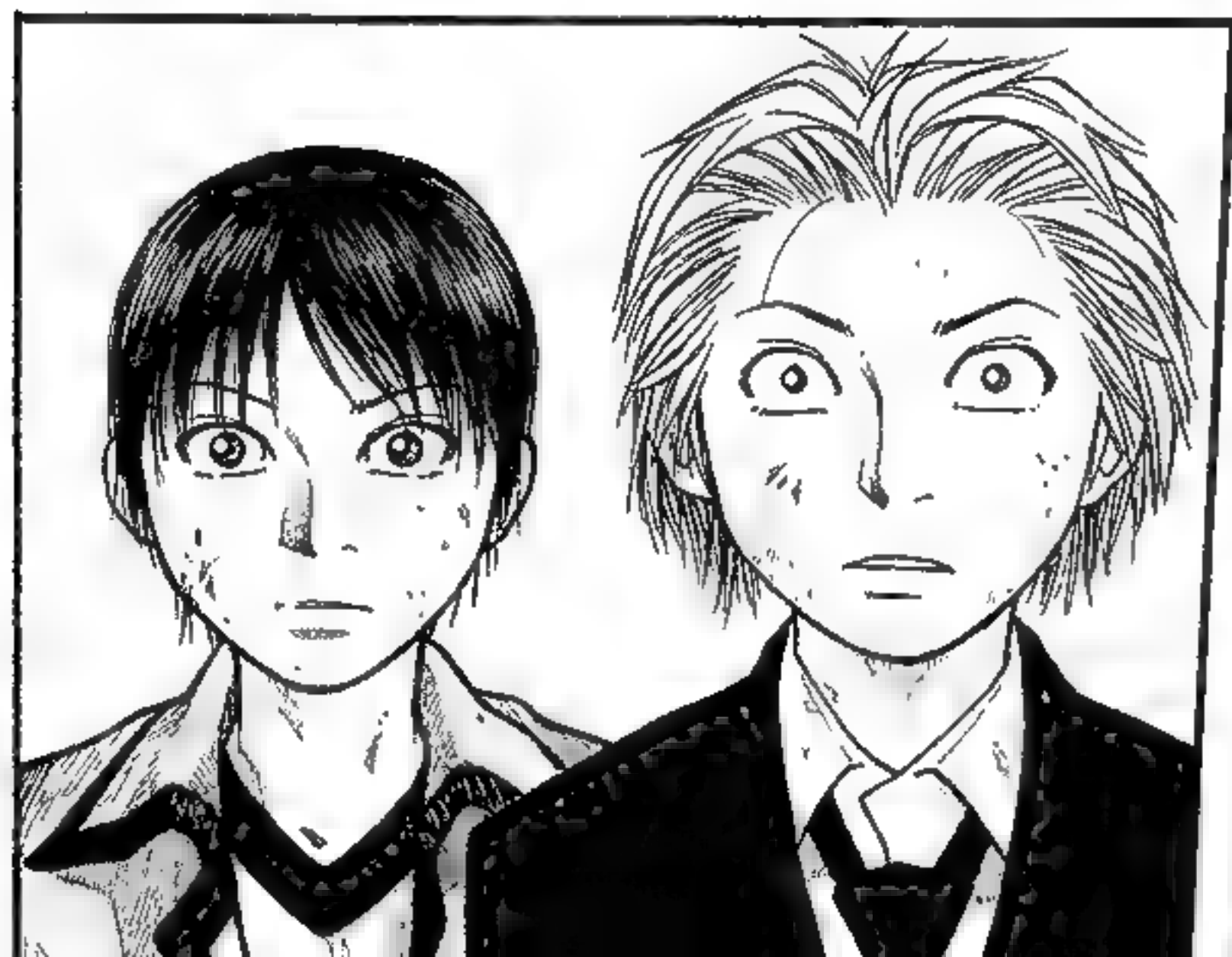
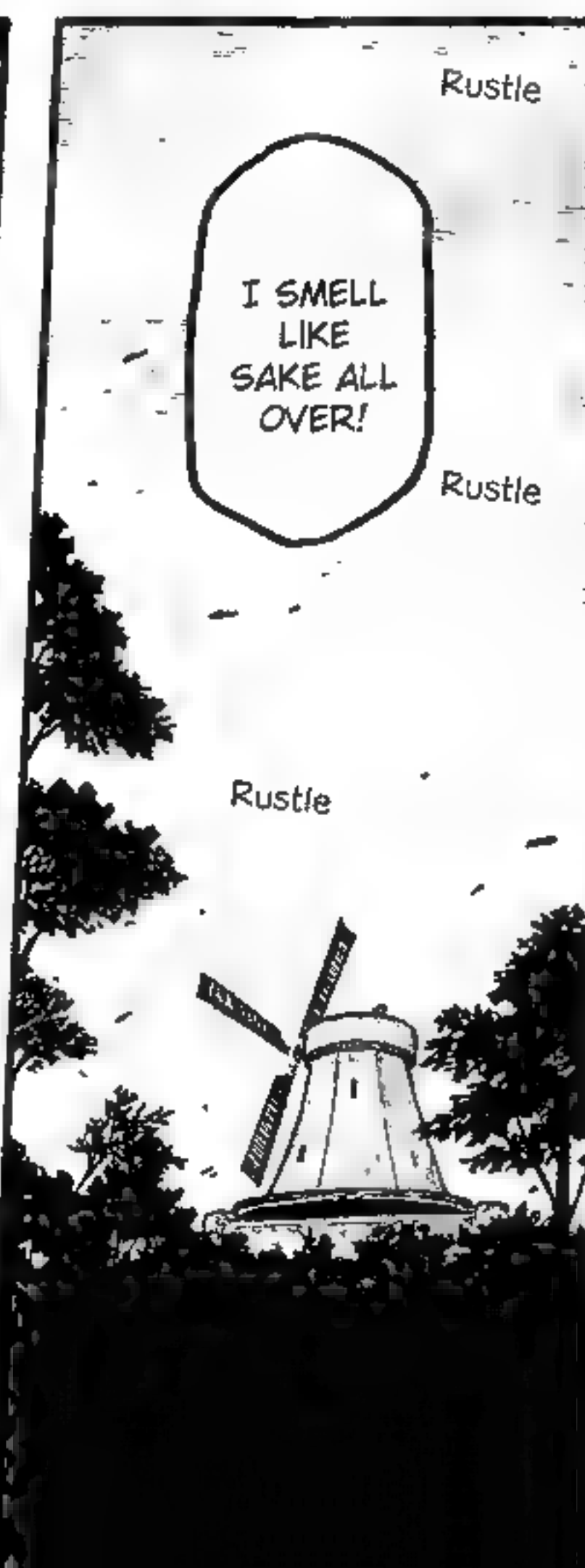
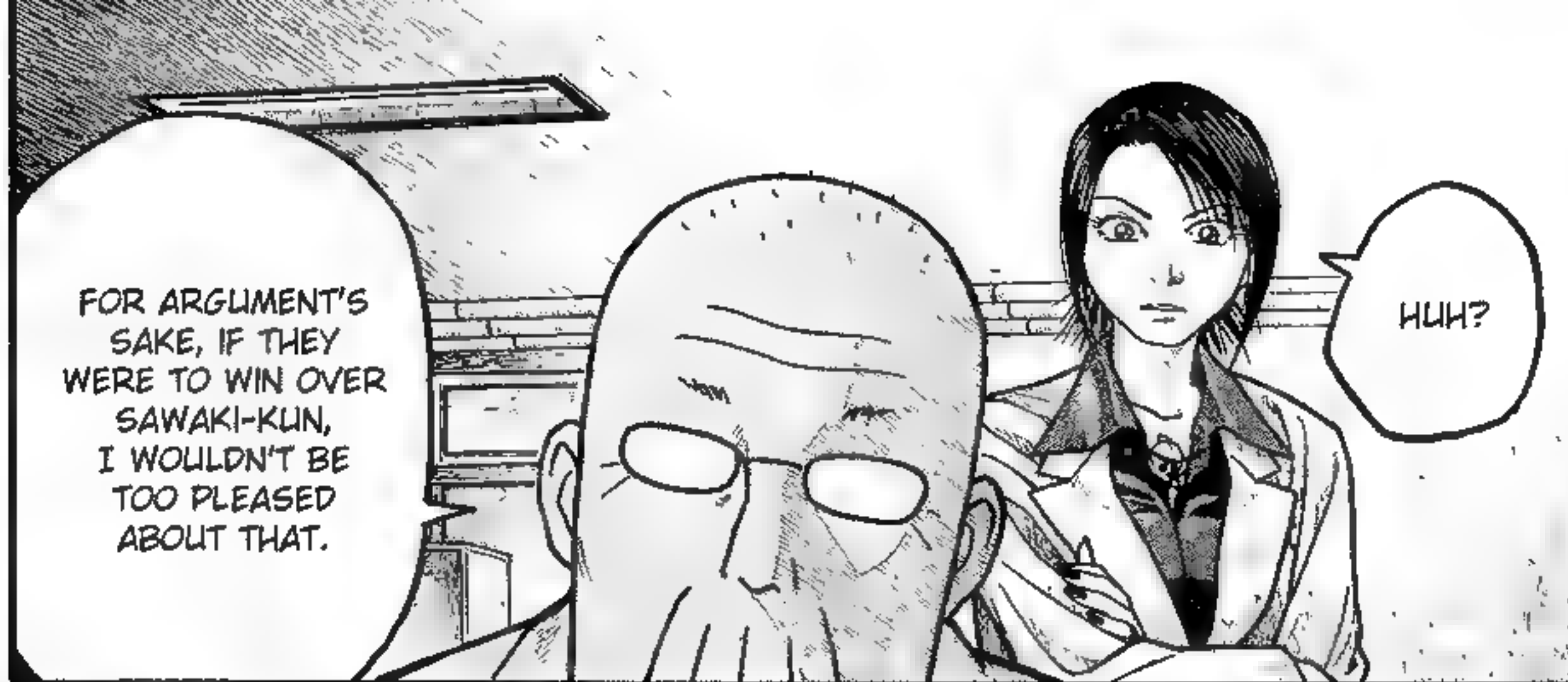
TAKUMA KAWAHAMA (A SECOND-YEAR) OFTEN HUNG OUT WITH MISATO, BUT IT SEEMED LIKE COMPARED TO MY SEMINAR, HE WAS MORE INTERESTED IN BIOLOGICAL RESOURCES AND NUTRITION.

ARE YOU GOING OUT?

...HASEGAWA-KUN,

I ACCIDENTALLY LET IT SLIP THAT A BOY WHO CAN SEE MICROBES WAS GOING TO ENROLL NEXT YEAR.

COME TO THINK OF IT, WHEN THEY BOTH CAME HERE,





Did you remember the new title?

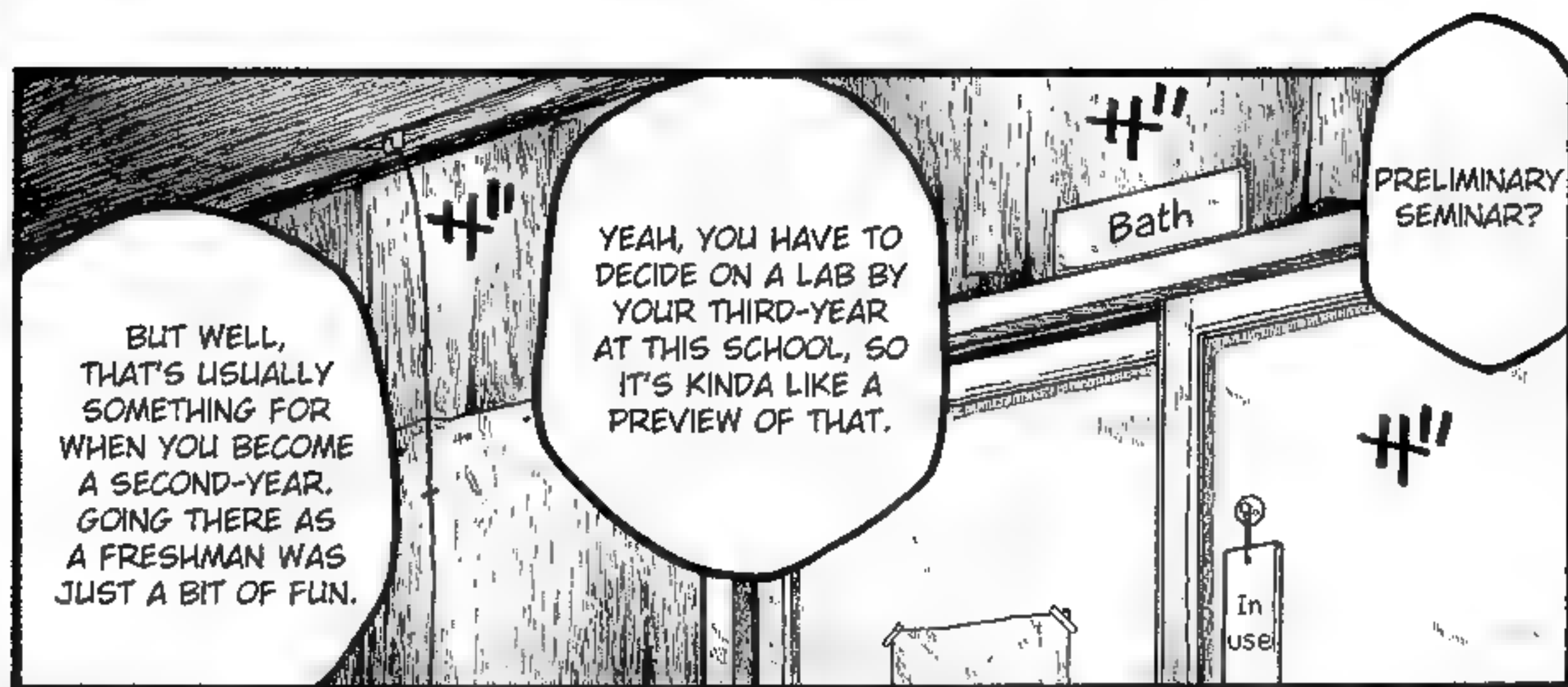
ちやん

The
so-called
autonomous
campus
dormitory
that's a
gathering
spot for
poor
students!

WHAT A
DUMP...



CH. 4: OLDER STUDENTS



Tadayasu Sawaki

He's the main character. For some reason, he has the ability to see microbes.

BUT WELL, THAT'S USUALLY SOMETHING FOR WHEN YOU BECOME A SECOND-YEAR. GOING THERE AS A FRESHMAN WAS JUST A BIT OF FUN.

YEAH, YOU HAVE TO DECIDE ON A LAB BY YOUR THIRD-YEAR AT THIS SCHOOL, SO IT'S KINDA LIKE A PREVIEW OF THAT.

PRELIMINARY SEMINAR?



Kei Yuuki

He's been Sawaki's friend since they were k.ds. His parents run a sake brewery just in case.

WHAT ARE YOU CAREFREELY TALKING ABOUT THAT ORIENTATION STUFF FOR?

AND SO, ITSUKI HELPED ME OUT FOR A LITTLE BIT.



Ke'zou Itsuki

He's a professor at a certain agricultural university. He might be planning various things.

NO BIGGIE. THEY'RE A LITTLE LAME, BUT THAT'S ALL WE HAD. THAT'S CLEAN, SO JUST BEAR WITH IT.

SORRY ABOUT HAVING TO BORROW SOME CLOTHES, TOO.



Haruka Hasegawa

She's a graduate student at a certain agricultural university. She's one of Professor Itsuki's students. Just like she looks, she has a forceful personality



I HEARD YOU HAVE AN ODD ABILITY...

YOU'RE... SAWAKI, RIGHT?



WELL THEN... LET'S GET GOING, KEI.

W-WAIT A SECOND!



Put the hair dryer back



Kaoru Misato

He's a second-year. Just like he looks, he doesn't have much money. He seems to like sake so much that he homebrews it.

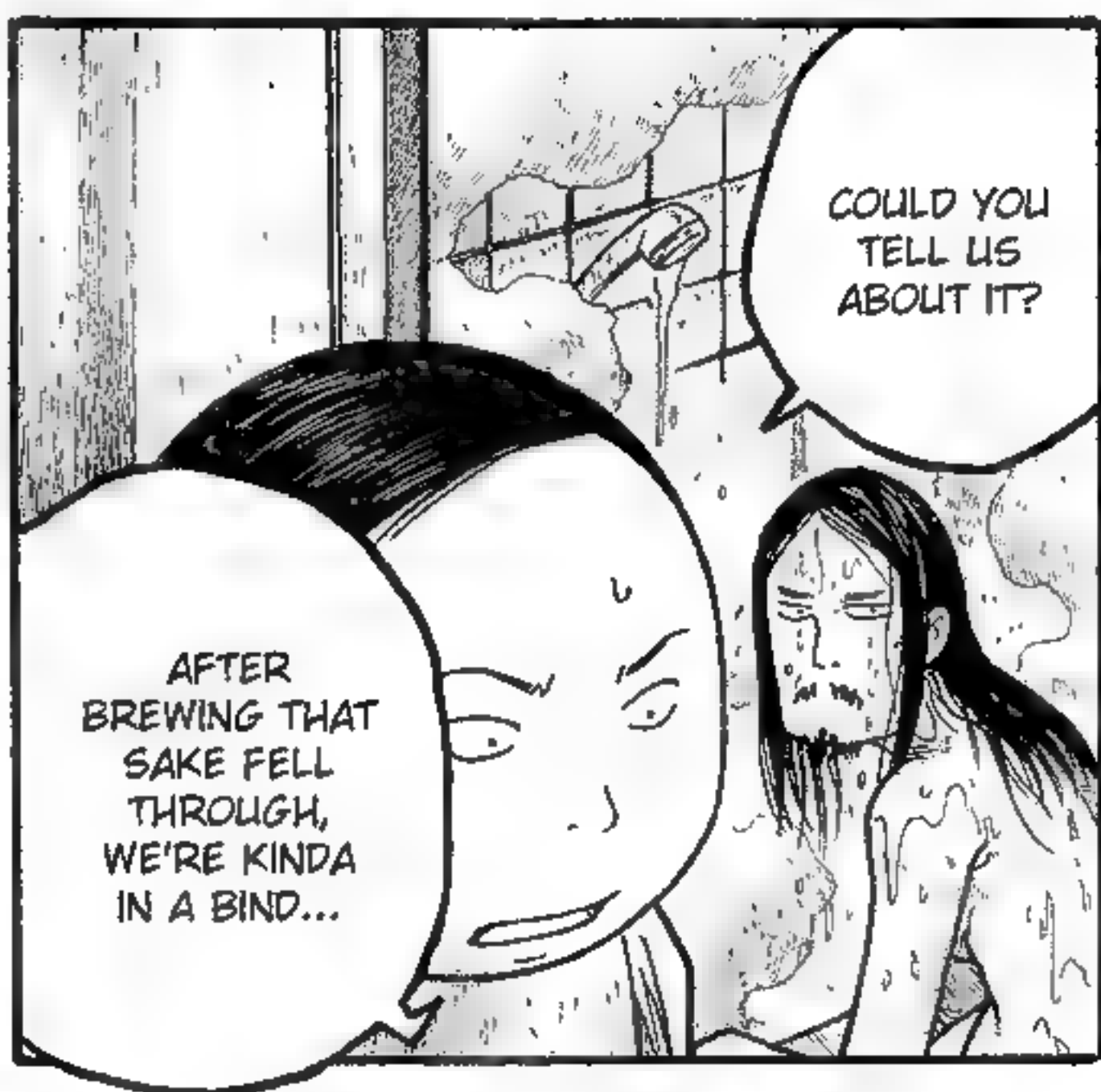


HUH?



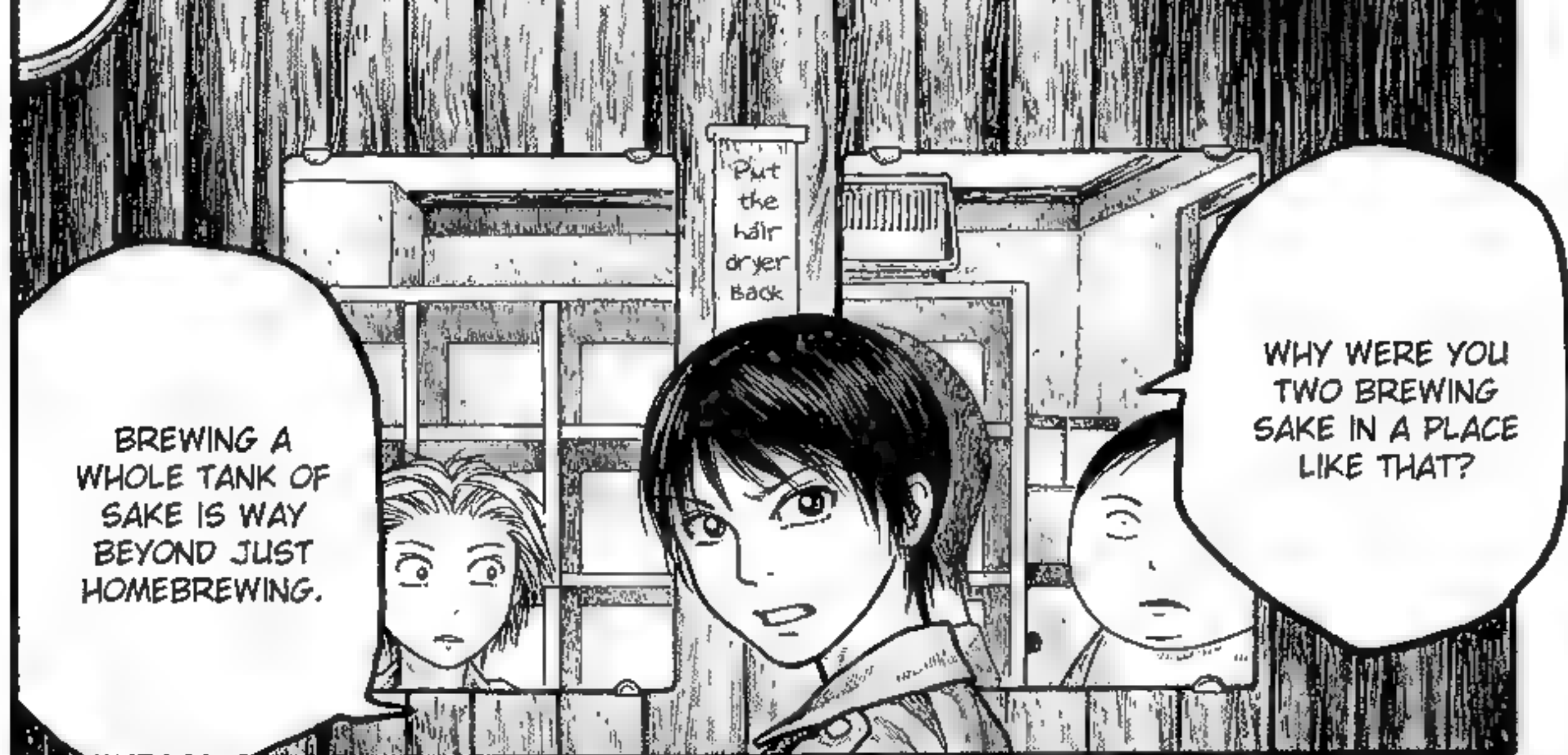
Takuma Kawahama

He's a second-year. He hangs out with Misato, but his intentions may be different.



COULD YOU TELL US ABOUT IT?

AFTER BREWING THAT SAKE FELL THROUGH, WE'RE KINDA IN A BIND...



BREWING A
WHOLE TANK OF
SAKE IS WAY
BEYOND JUST
HOMEBREWING.

WHY WERE YOU
TWO BREWING
SAKE IN A PLACE
LIKE THAT?



FOR NOW,
LET'S TALK
IN OUR
ROOM.

I'M ALL
EARS.

KEI...I'M
SURPRISED
HOW MUCH
YOU LIKE
MEDDLING
IN STUFF.



AND ALL OF
THAT WENT TO
WASTE...TALK
ABOUT A HUGE
WASTE OF MONEY.

IT DOESN'T MAKE
ANY SENSE. I CAN'T
EVEN IMAGINE
DOING THAT AS
SOMEONE WHOSE
FAMILY OWNS A
BREWERY...



WELL,
ABOUT
THAT...

WE'RE IN
DESPERATE
NEED OF
MONEY...





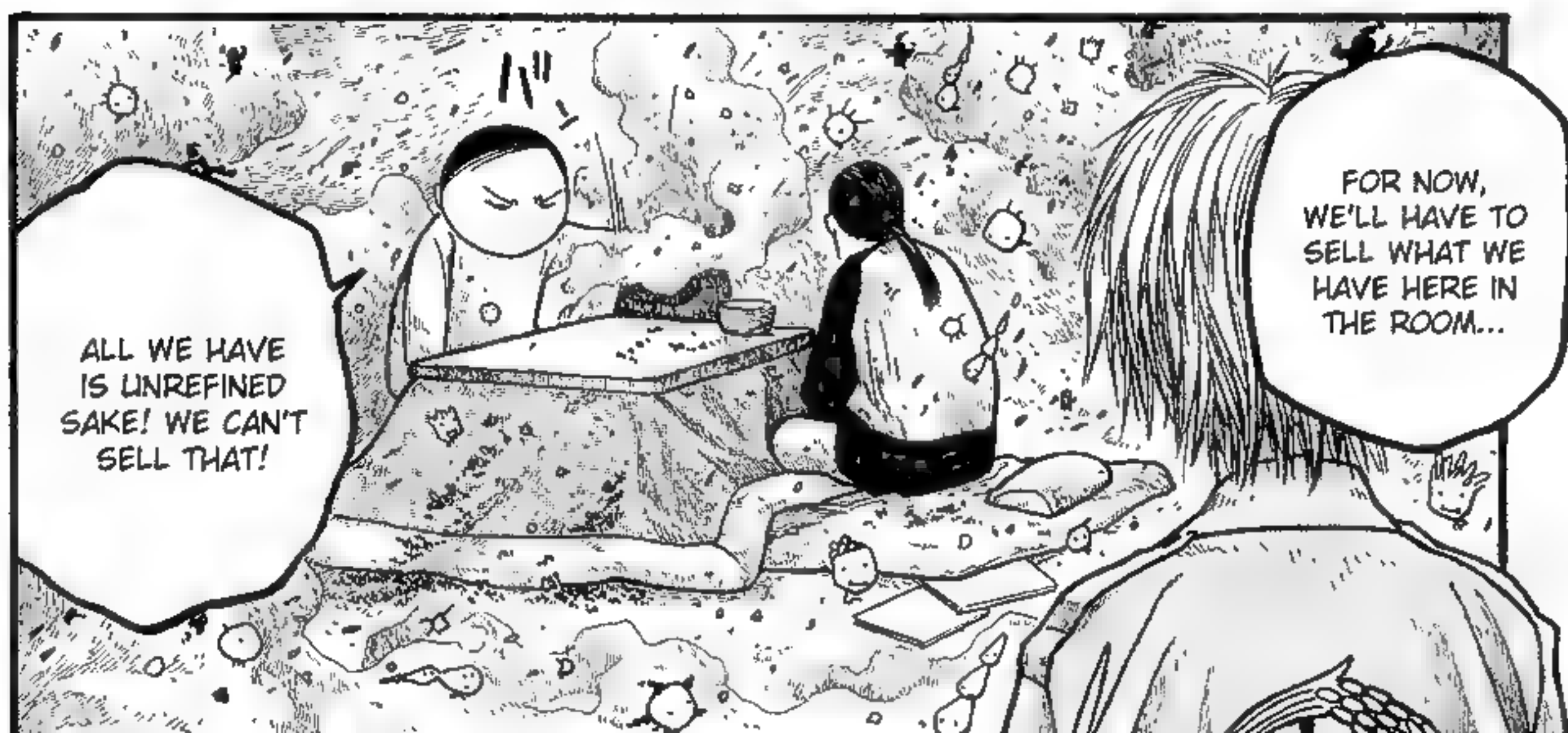
CALM DOWN...
LET'S
JUST THINK
ABOUT IT.

WHAT
ARE WE
GONNA DO,
MISATO...?



BUT WE'LL BE IN
DEEP SHIT IF WE
DON'T AT LEAST
RETURN THE
MONEY WE
COLLECTED...

THERE'S
NOTHING
TO THINK
ABOUT...WE'RE
ALL OUT OF
IDEAS AND
MONEY...



ALL WE HAVE
IS UNREFINED
SAKE! WE CAN'T
SELL THAT!

FOR NOW,
WE'LL HAVE TO
SELL WHAT WE
HAVE HERE IN
THE ROOM...



Candida
There isn't anything special about it. It's near you right now



THAT TANK AMOUNTED TO ALL THE SAKE WE MADE WITH THAT MONEY.

IF IT HAD WORKED, WE COULD HAVE PAID OFF THE DORM FEES WE'VE AMASSED, TOO...



YOU WERE GONNA SELL THAT SAKE?

BUT IT SEEMED LIKE YOUR DORMMATES WERE COUNTING ON YOU, TOO...



WE WERE GOING TO SELL THAT SAKE AT A DRINK BAR FOR THE SPRING FESTIVAL...

WE COLLECTED MONEY FROM THE GUYS RUNNING THE DRINK BAR WHEN WE TOLD THEM THAT WE COULD GET THEM SOME CHEAP SAKE.



Alternaria
If you don't wash contact lenses, they'll become a home for them



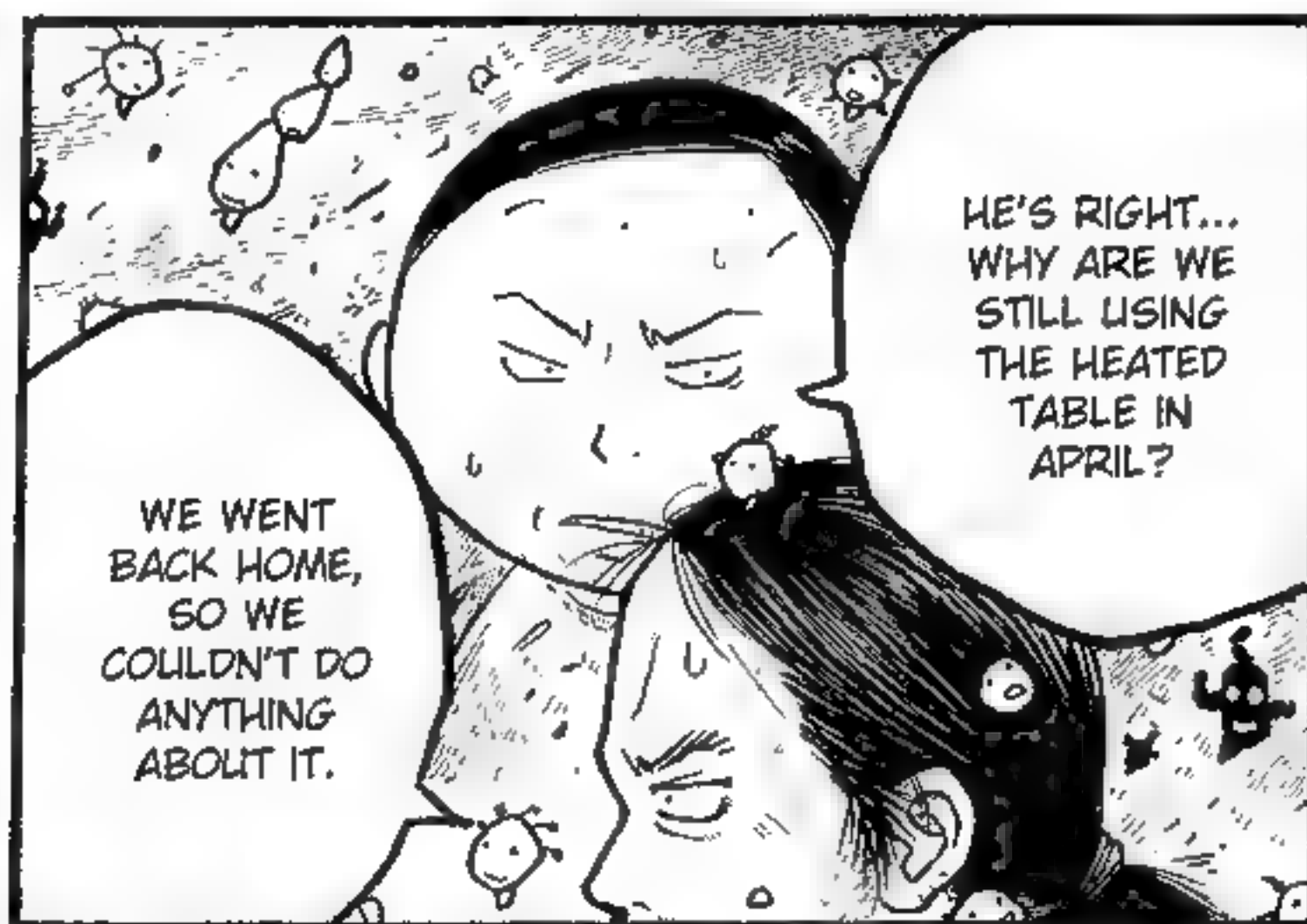
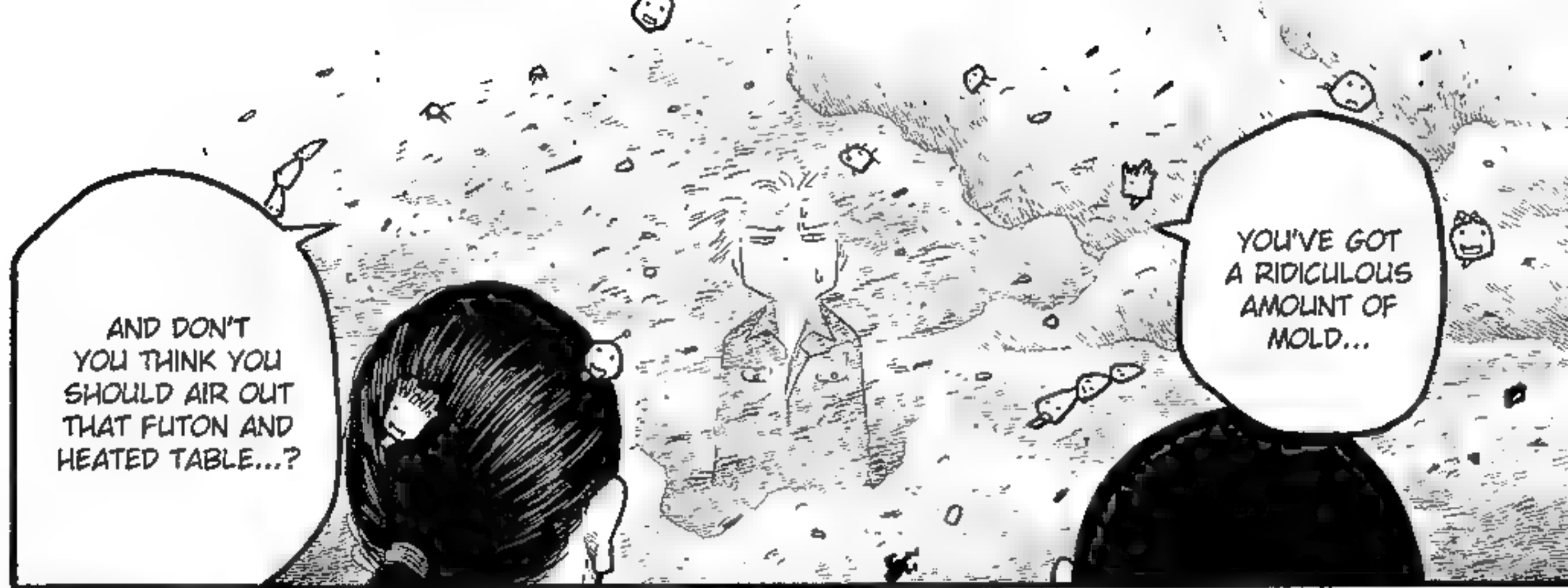
BEFORE WE GET TO THAT...

COULD WE VENTILATE THIS ROOM A LITTLE?



BUT THEN IT SPOILED AND THE TANK FELL OVER...

NOW WE'LL HAVE TO SKIP TOWN...



Geotrichum
It's concerned about its light complexion, but it likes to drink milk at home



M. mucedo
It has a lot of pretty hard-working friends



A. niger
It supports the c tric ac d demand from the shadows.



R. japonicus

It's in the Rhizopus genus
In China, its fr ends participate in brewing alcohol



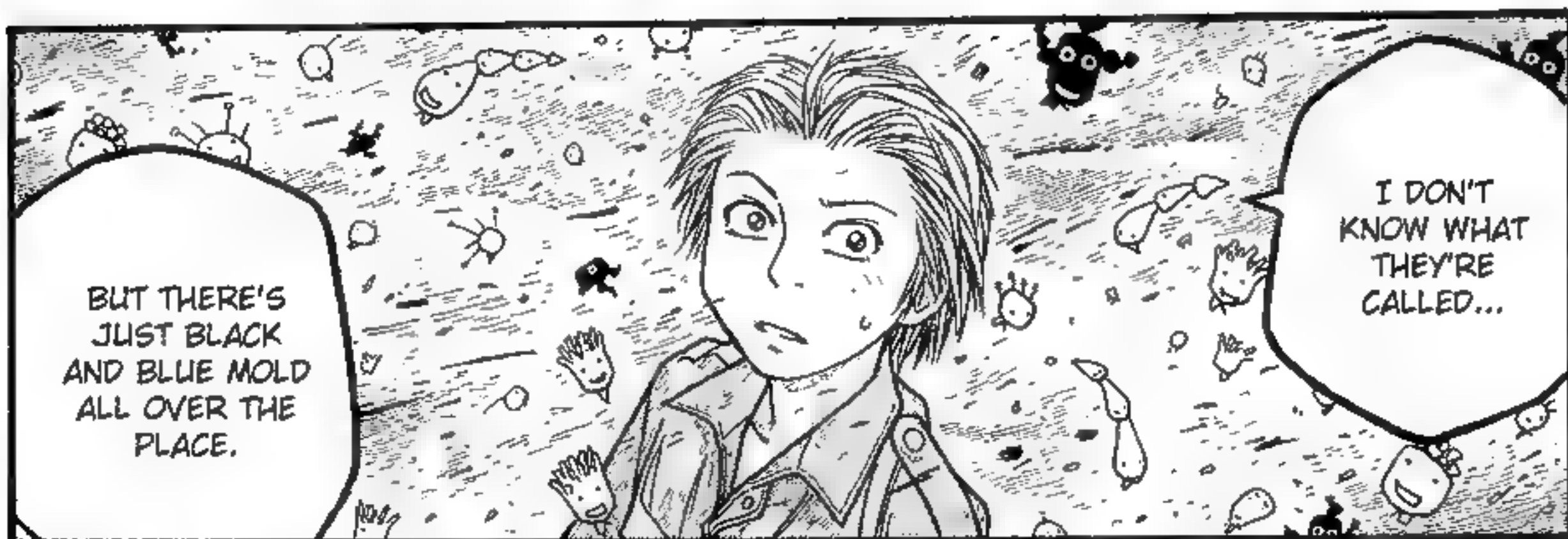
THERE ISN'T ANYTHING UNUSUAL...

THEY'RE ALL JUST THINGS YOU SEE EVERYWHERE.



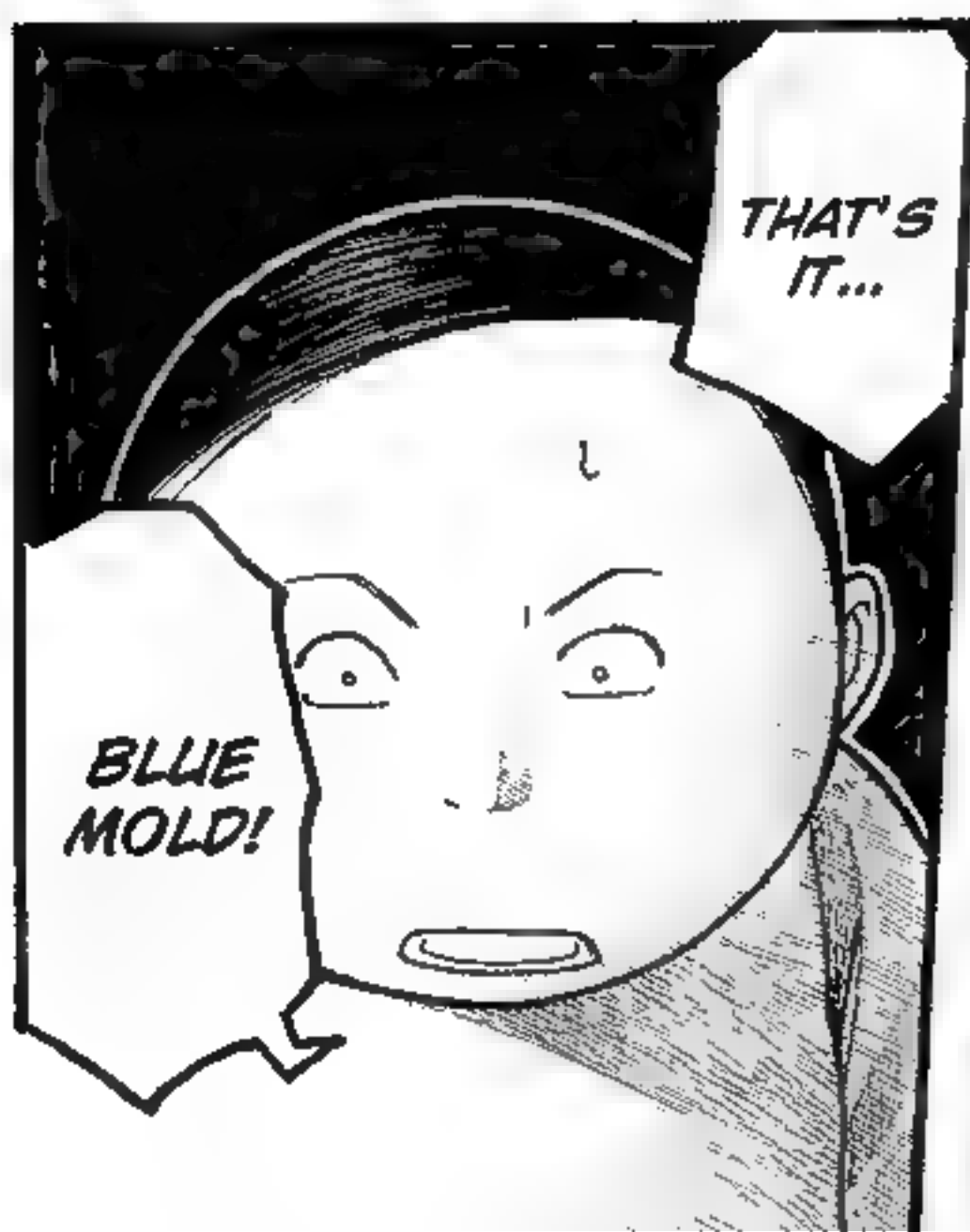
IT DOESN'T EVEN HAVE TO BE A NEW SPECIES.

IS THERE ANYTHING THAT WE COULD SELL LIKE MATSUTAKE MUSHROOMS OR SOMETHING?



BUT THERE'S JUST BLACK AND BLUE MOLD ALL OVER THE PLACE.

I DON'T KNOW WHAT THEY'RE CALLED...



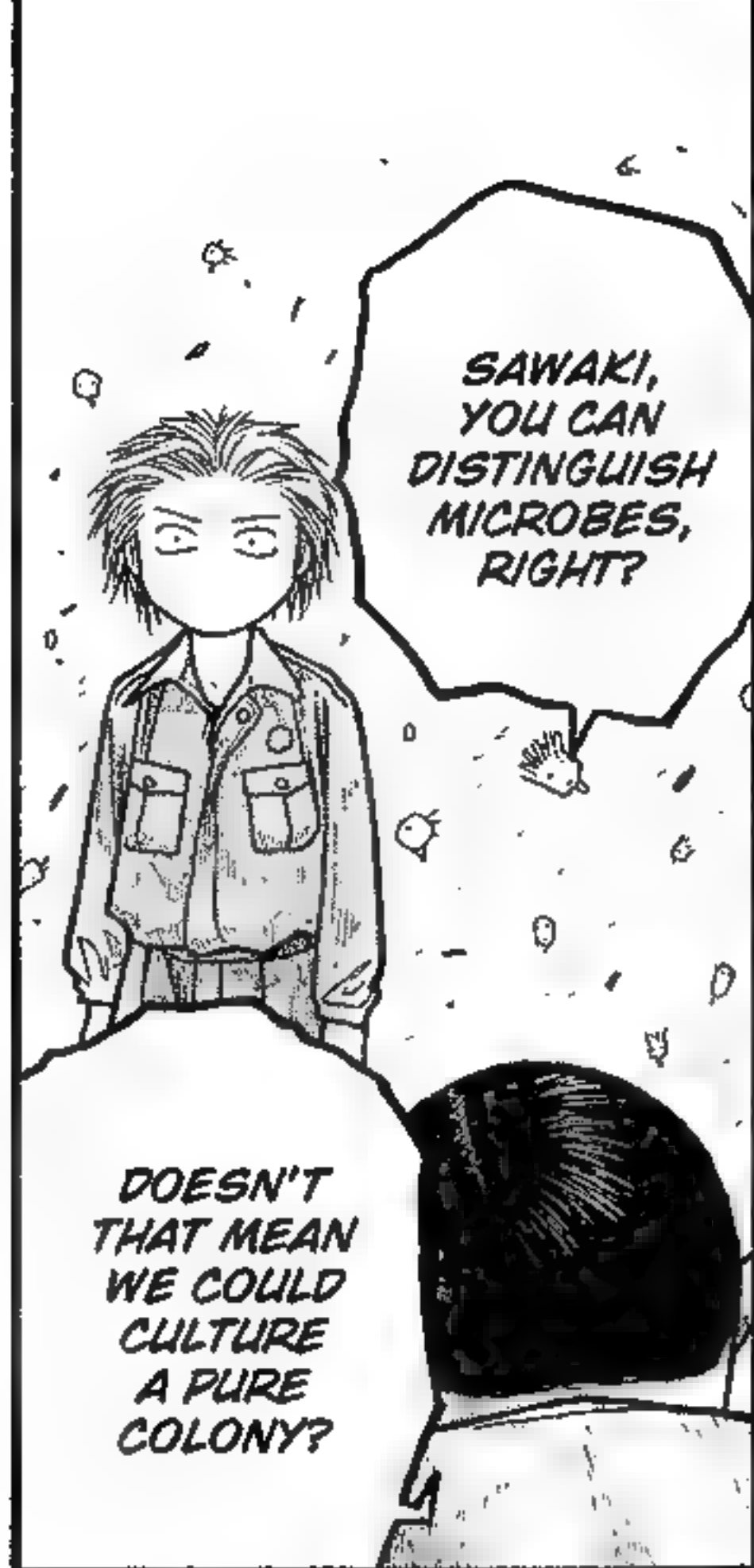
THAT'S IT...

BLUE MOLD!



SO MUCH FOR THAT...

HM?



SAWAKI,
YOU CAN
DISTINGUISH
MICROBES,
RIGHT?

DOESN'T
THAT MEAN
WE COULD
CULTURE
A PURE
COLONY?



THAT'S
PENICILLIN!

PENICILLIN IS
MADE FROM A
TYPE OF BLUE
MOLD CALLED
P. CHRYSOGENUM!

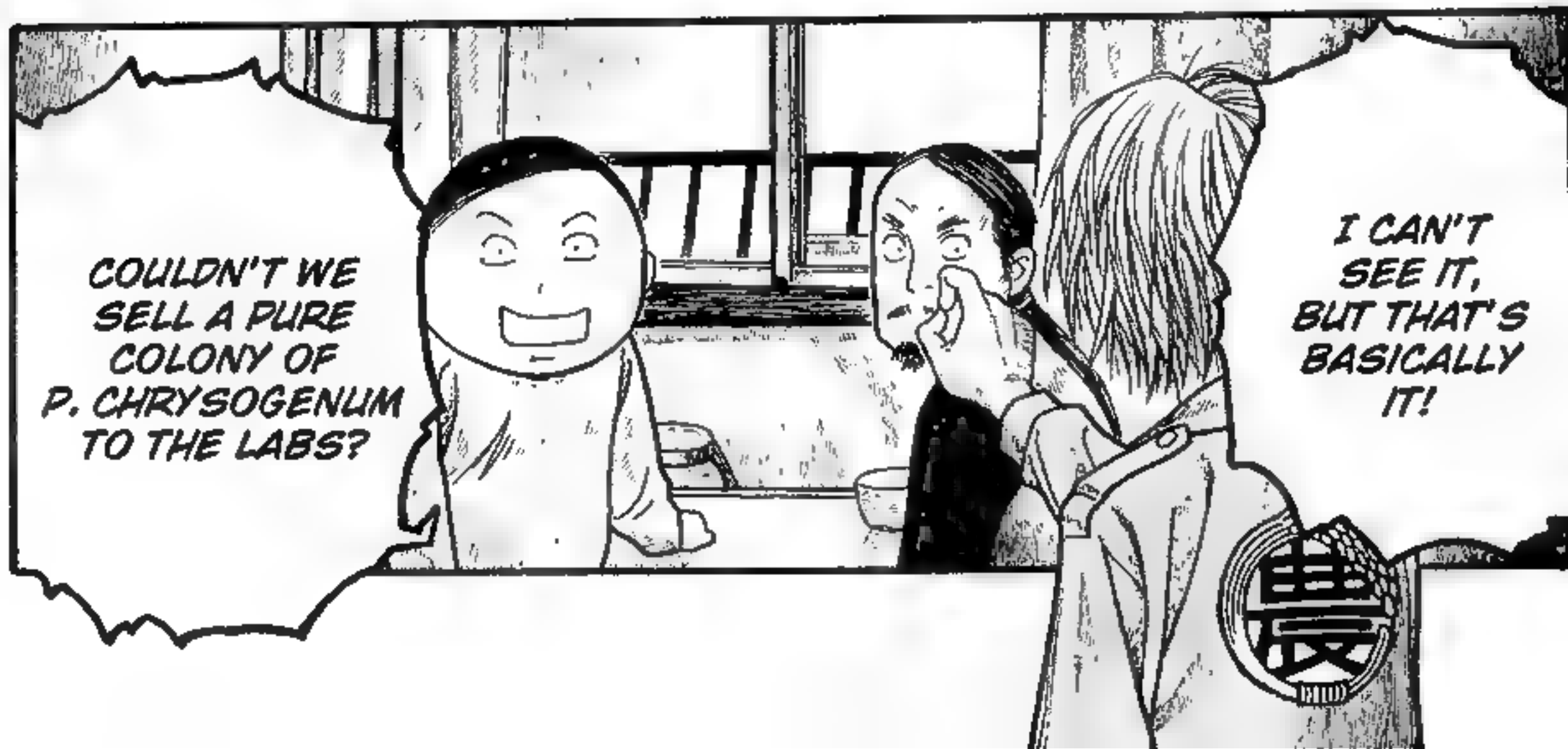


BUT ALL I
HAVE TO DO
IS PUT ONE OF
THESE GUYS IN
A PETRI DISH,
RIGHT?

I DON'T
REALLY
GET IT...



P.
chrysogenum
& other
friends
in the
Penicillium
genus
Over 200
species of
its friends
have been
discovered.



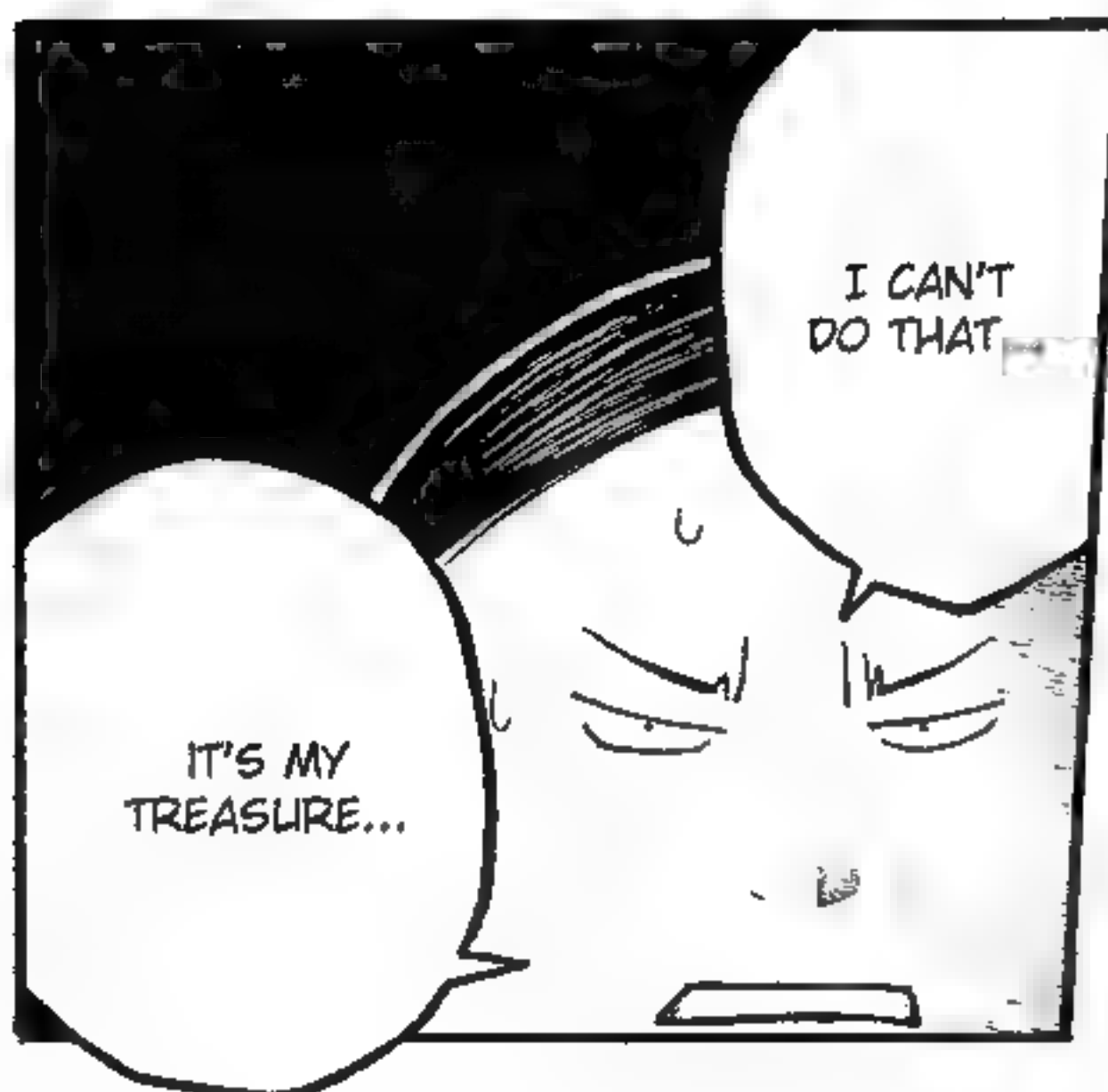
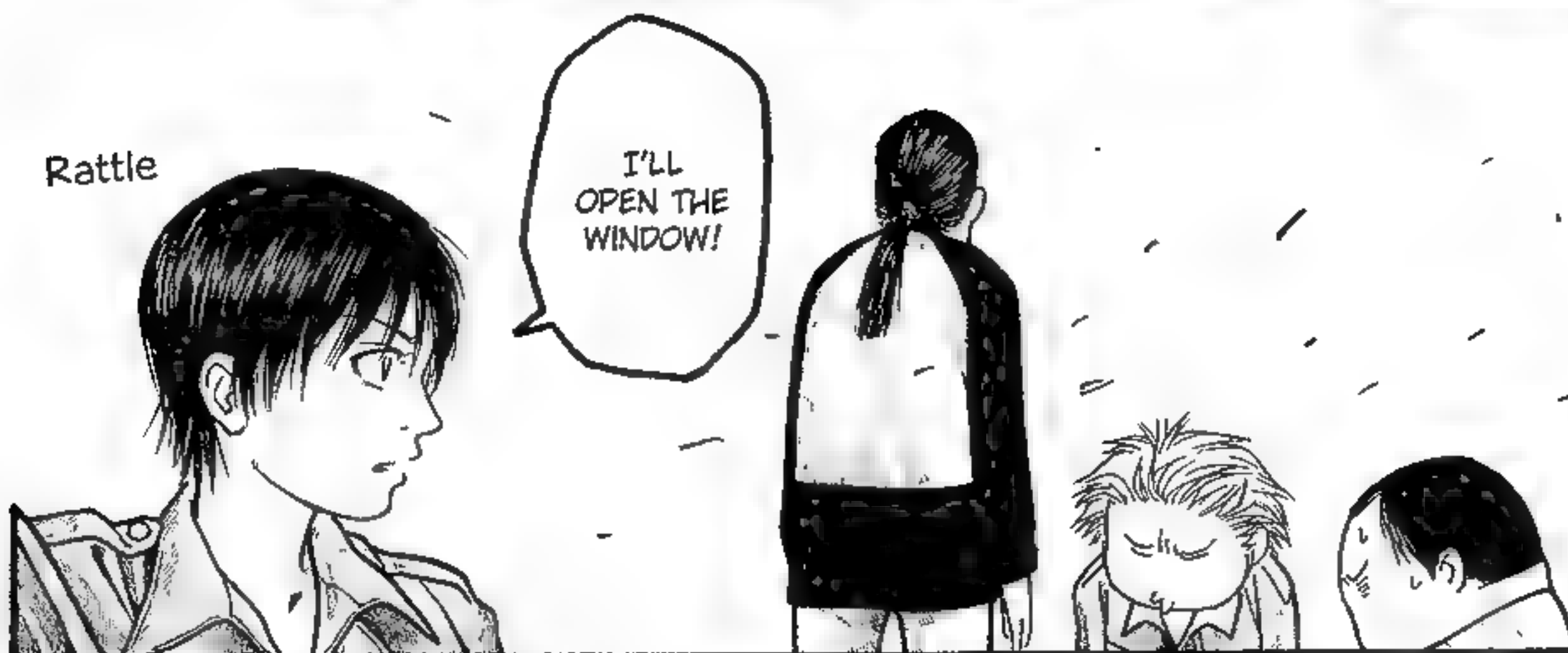
COULDN'T WE
SELL A PURE
COLONY OF
P. CHRYSOGENUM
TO THE LABS?

I CAN'T
SEE IT,
BUT THAT'S
BASICALLY
IT!



A. oryzae
The point is, microbes are everywhere.







BUT WE'LL
STILL GET
MONEY FOR IT!
WE NEED
MONEY!

THE INSECT
BUBBLE BURST,
SO EVEN IF WE
SOLD IT, IT
WON'T AMOUNT
TO MUCH!

THERE'S NO
OTHER OPTION!
WE'RE IN DEEP
SHIT IF WE
DON'T DO
SOMETHING!



THEY'RE
JUST
MOTHS!

AND
THEY'RE
ALL DEAD
NOW!



I ALREADY
GAVE YOU
SILKWORMS
BEFORE!

FORGET
IT!



YOU MEAN
THESE!?

IF WE SPIN
SILK FROM
THEM AND
SELL IT...



LET'S THINK
UP SOME
WAYS TO
EARN MONEY
EVEN IF WE
HAVE TO PULL
A KATSUMI ♡
SAYURI!

WHAT ARE
WE GONNA
DO!? WE'RE
BETWEEN A
ROCK AND A
HARD PLACE!

Silkworm



Katsumi
♡
Sayuri
They are a
comedian
duo from
Kansai
who special-
ize in ideas
for side
businesses

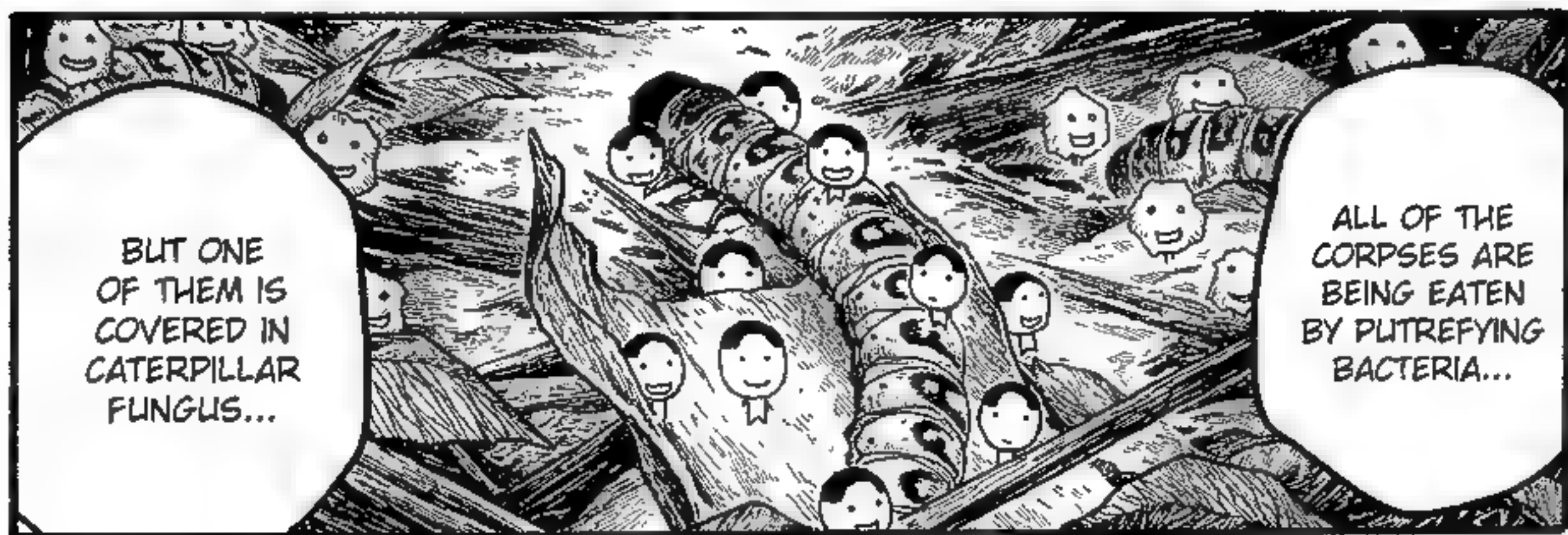


ON THESE
MUMMIFIED
CATERPILLARS?

HUH?



THIS IS
CATER-
PILLAR
FUNGUS!



BUT ONE
OF THEM IS
COVERED IN
CATERPILLAR
FUNGUS...

ALL OF THE
CORPSES ARE
BEING EATEN
BY PUTREFYING
BACTERIA...



C. sinensis
Also known
as caterpillar
fungus, it
lives in the
larvae of
ghost moths.
It's called
dong chong
xia cao in
China



BUT...
HOW DO
YOU KNOW
THAT?

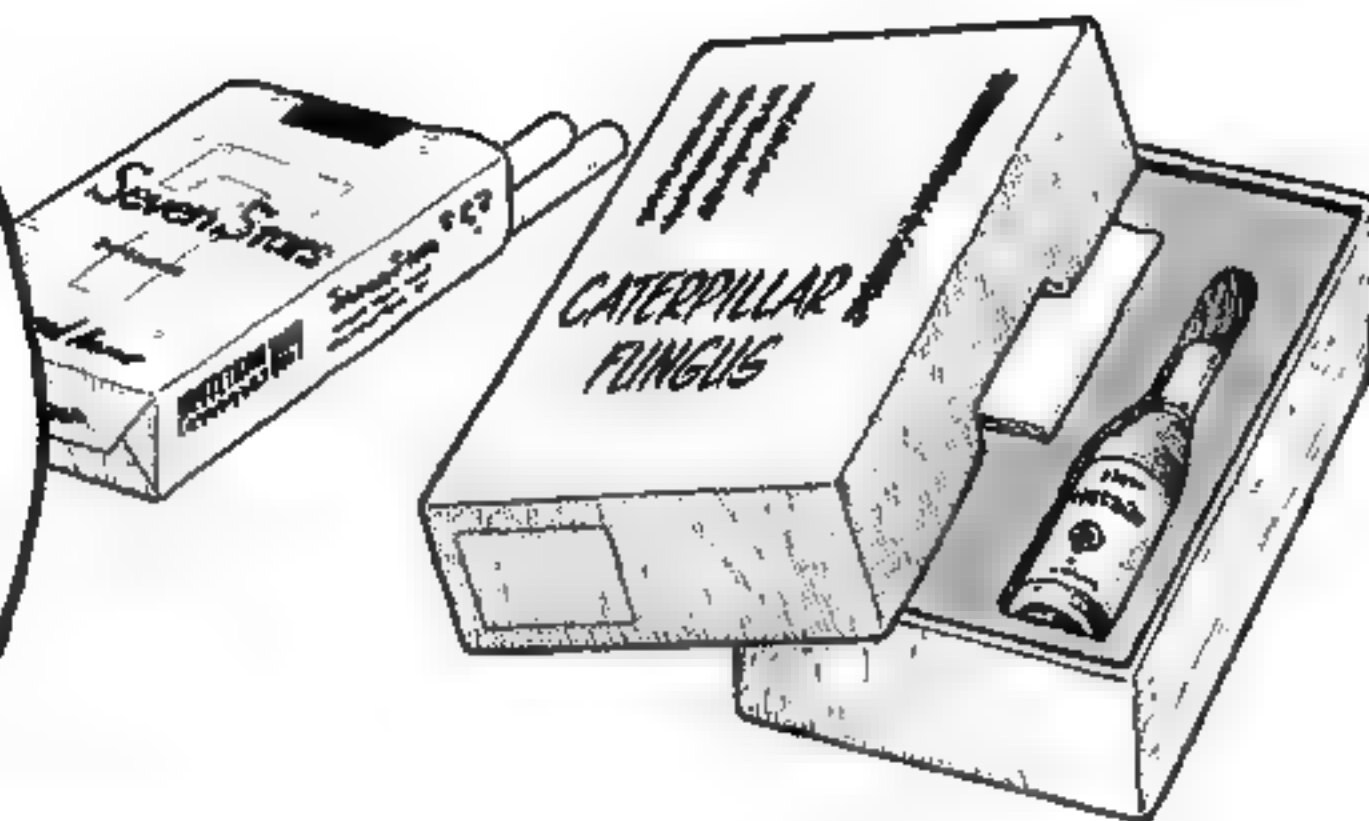
YOU KNOW
THAT SEKIGUCHI
LADY WHO
LIVES NEAR
THE BRIDGE?



THEY LOOK
THE SAME
TO ME...

WELL,
THEY'RE JUST
DEAD INSECTS,
AFTER ALL...

SHE SAID
THAT ONE OF
THOSE SMALL
BOXES COST
20,000 YEN.



SHE ALWAYS
USED TO BUY
THE STUFF.

IT'S HARD TO
FIND IN NATURE,
SO IT'S
APPARENTLY
EXPENSIVE.

She still
has her
shoes
on

It's a
woman

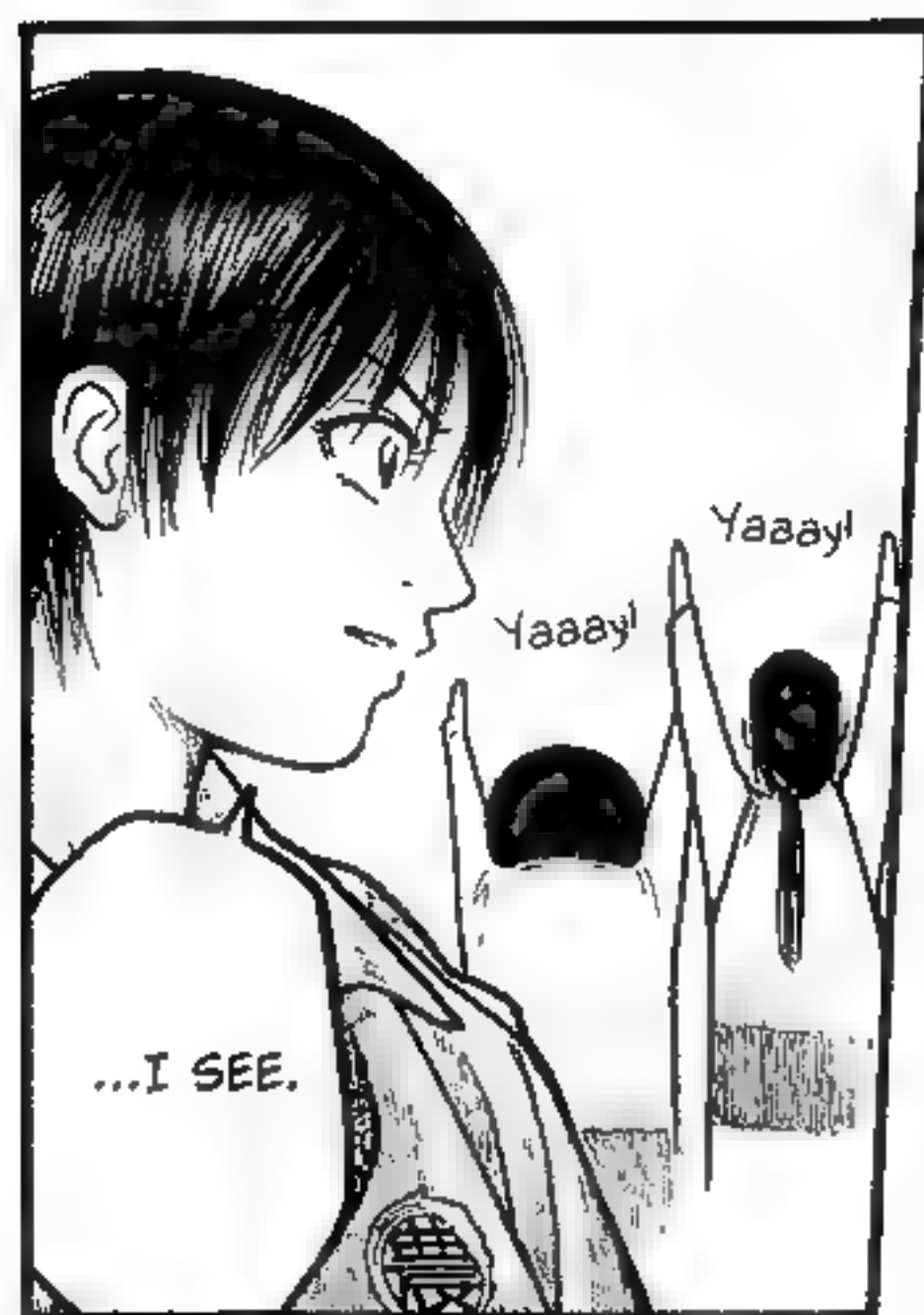
IF YOU CULTURED
THIS, COULDN'T
YOU SELL IT
TO A CHINESE
APOTHECARY?

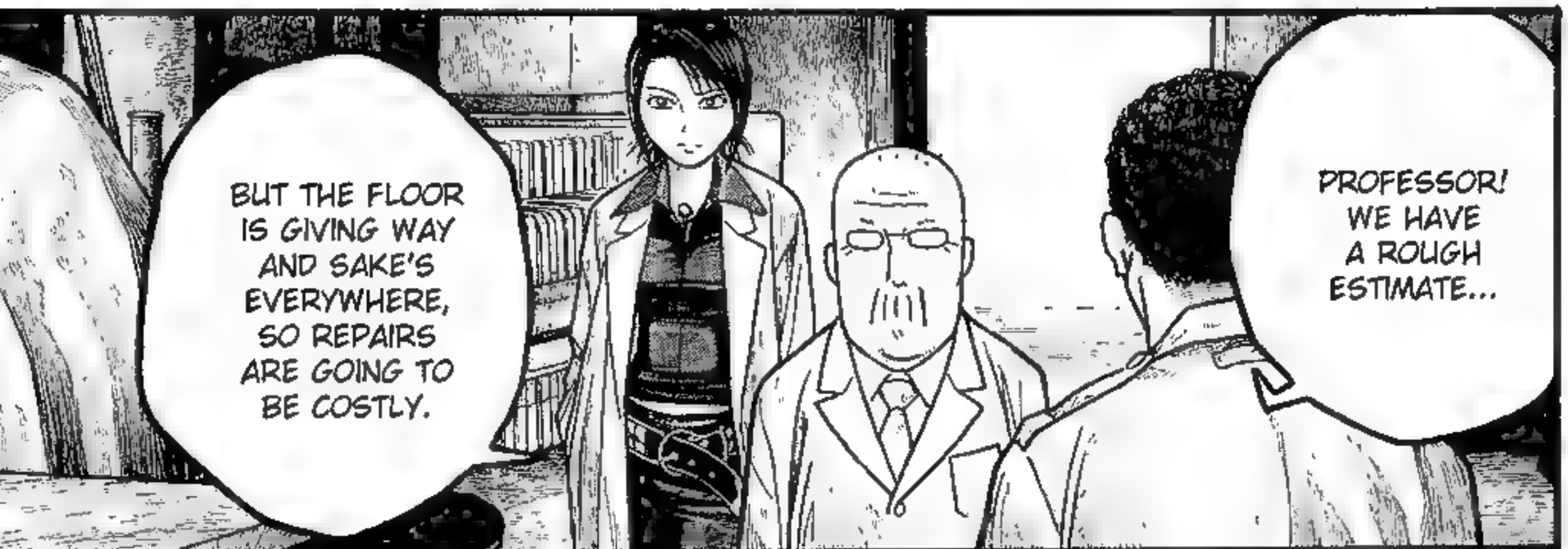
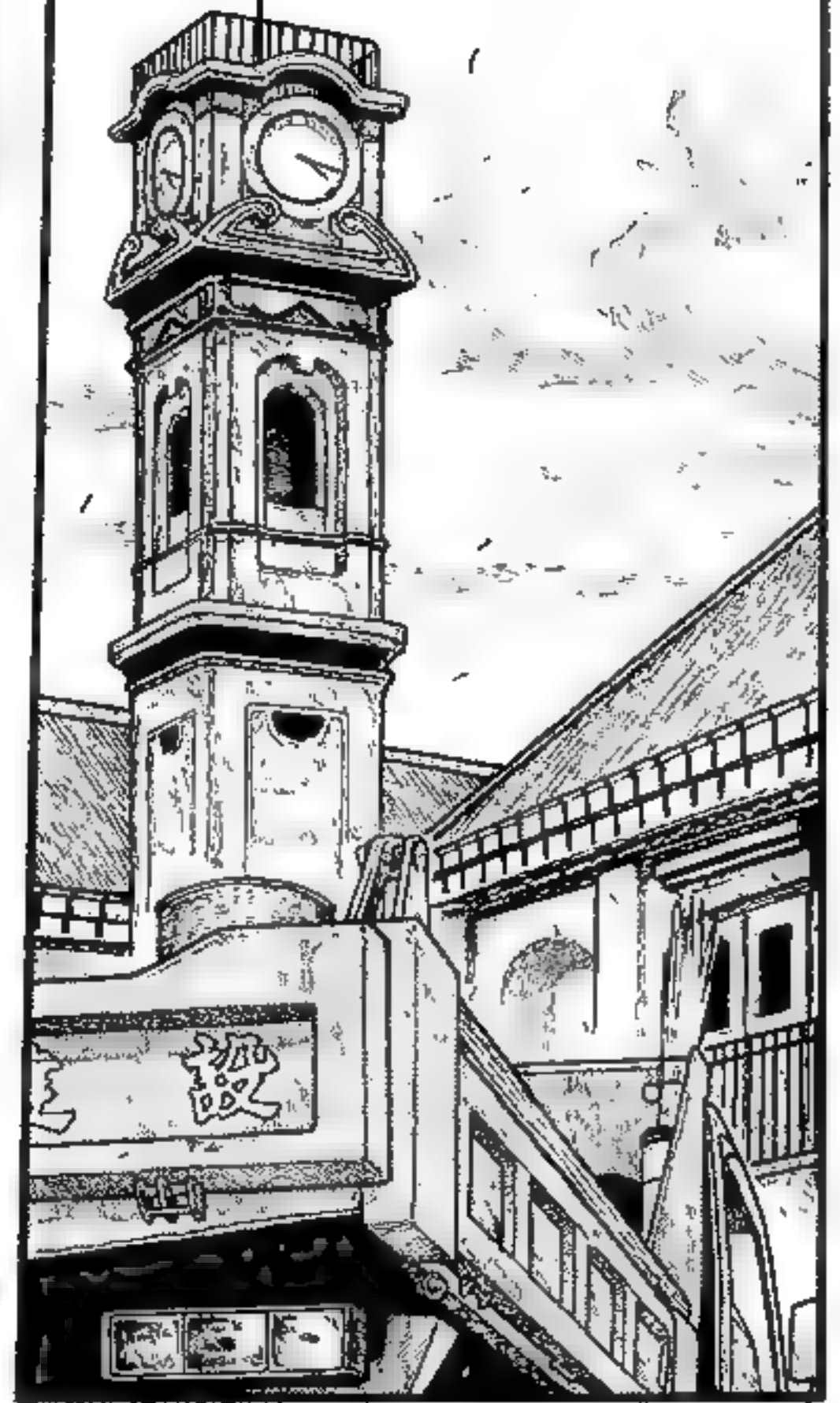
YOU MEAN
THAT SECRET
REMEDY IN
CHINA THAT
PROMOTES
YOUTH AND
LONGEVITY?

CATERPILLAR
FUNGUS...

I HEARD IT'S
EVEN USED TO
WHITEN SKIN
NOWADAYS,

ALTHOUGH IT'S
AMAZING THAT
THEY'D PUT
LIVING BACTERIA
THAT EATS
BUGS ON THEIR
FACES.





Also known as "hiuchi bacteria", it loves sake. It caused a big problem in the last chapter.



Even among microbes, there's a lot of mold (Fungus).



S.
cerevisiae
This is yeast
It taught
humanity
about
fermentat on.



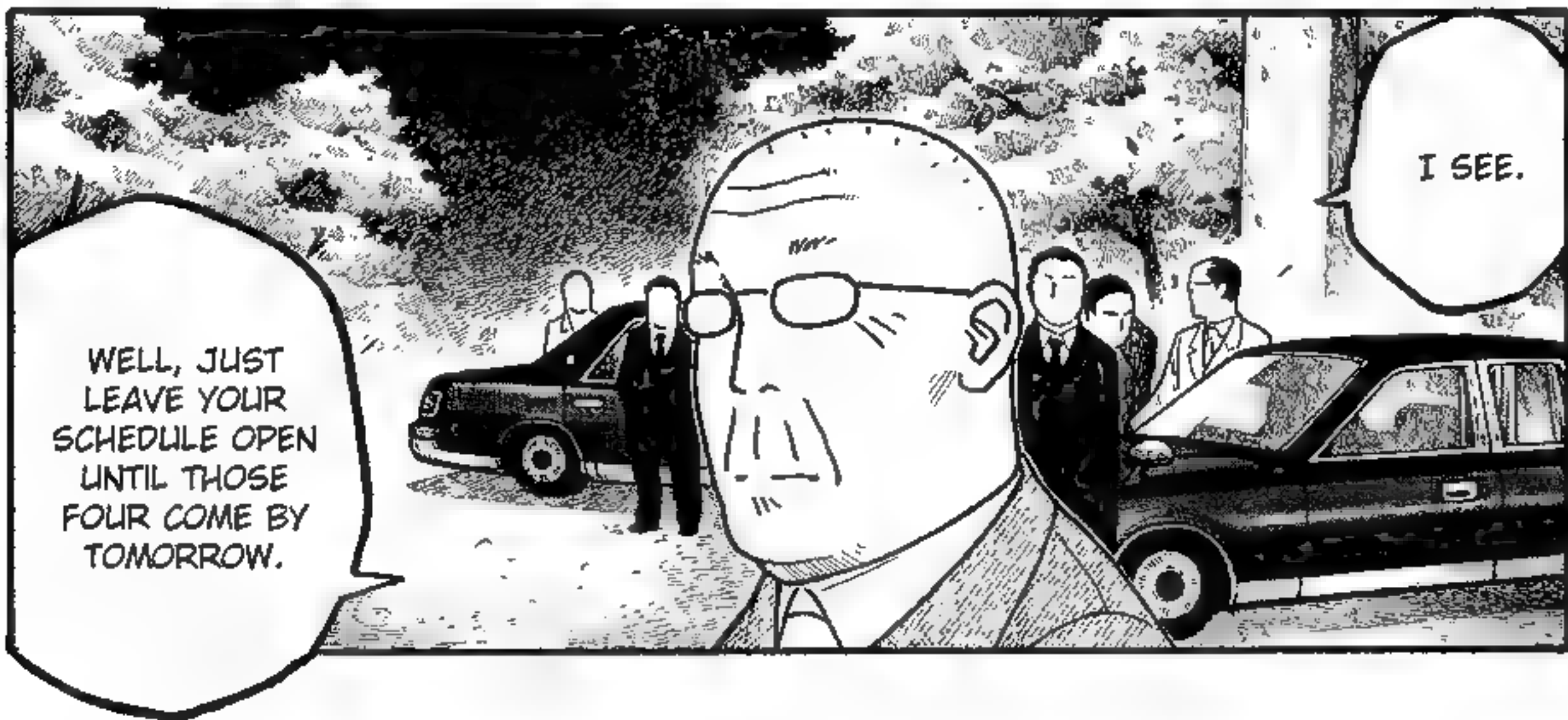
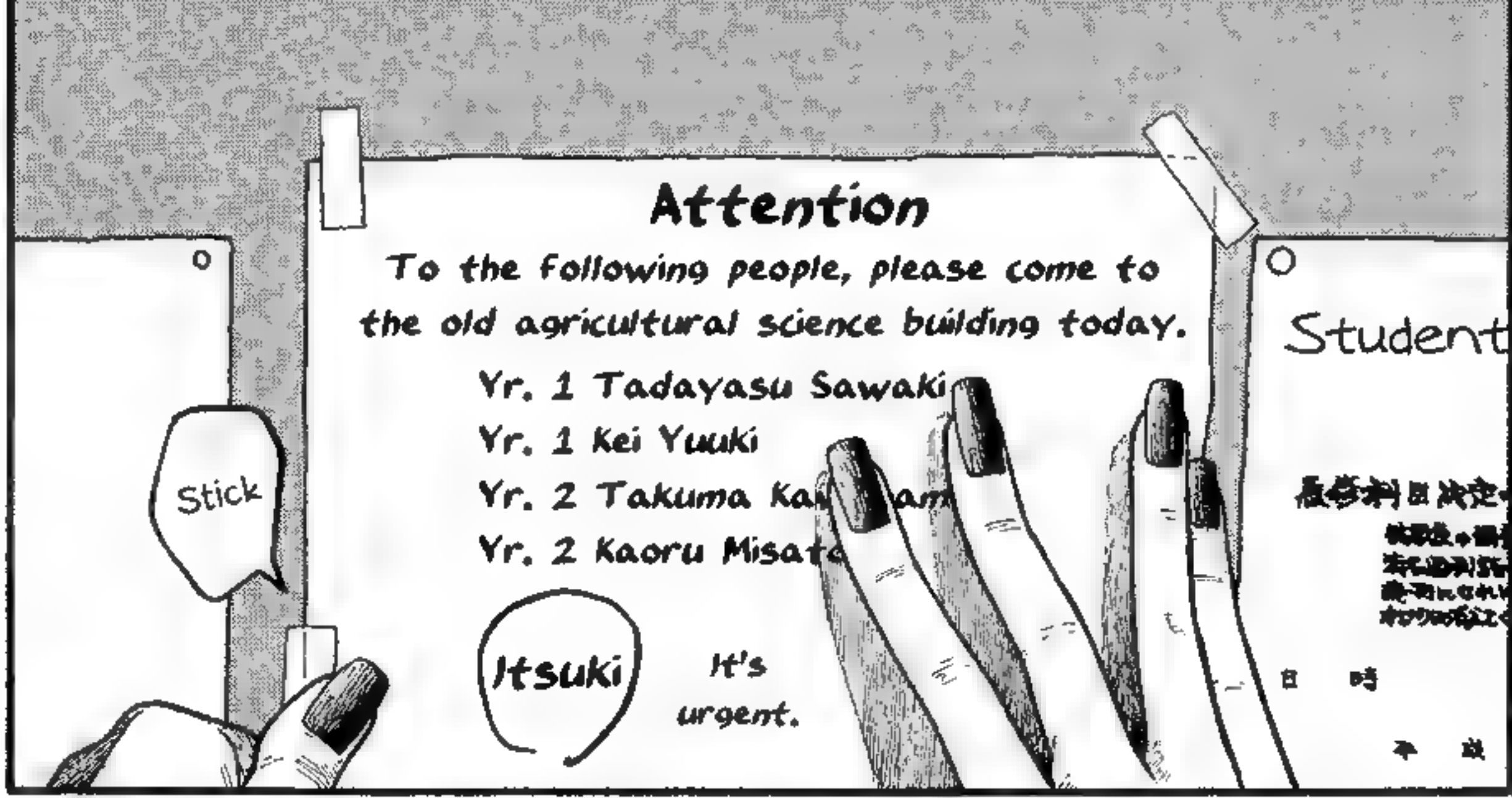
Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com



[Apology] Because of the author's sudden illness, instead of the usual 20 pages, there are 12 pages.



The logo was redesigned.

武蔵野

Why
does a
university
professor
need to
commute
to work
in a
black
car...?

WE'LL TAKE
YOUR BAG,
PROFESSOR!

WE HAVE A
SPECIAL SEAT
PREPARED FOR
YOU TODAY,
PROFESSOR.

CH. 5: NIGHT

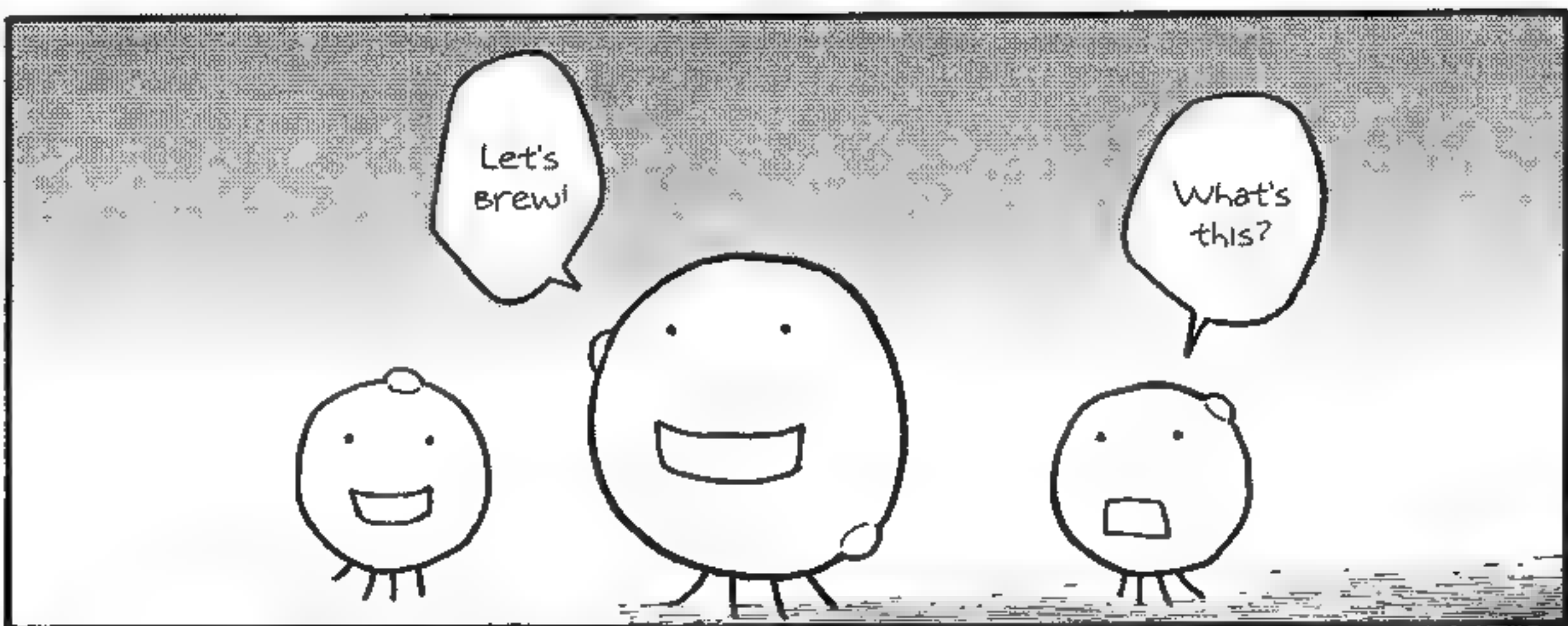


Tadayasu Sawaki

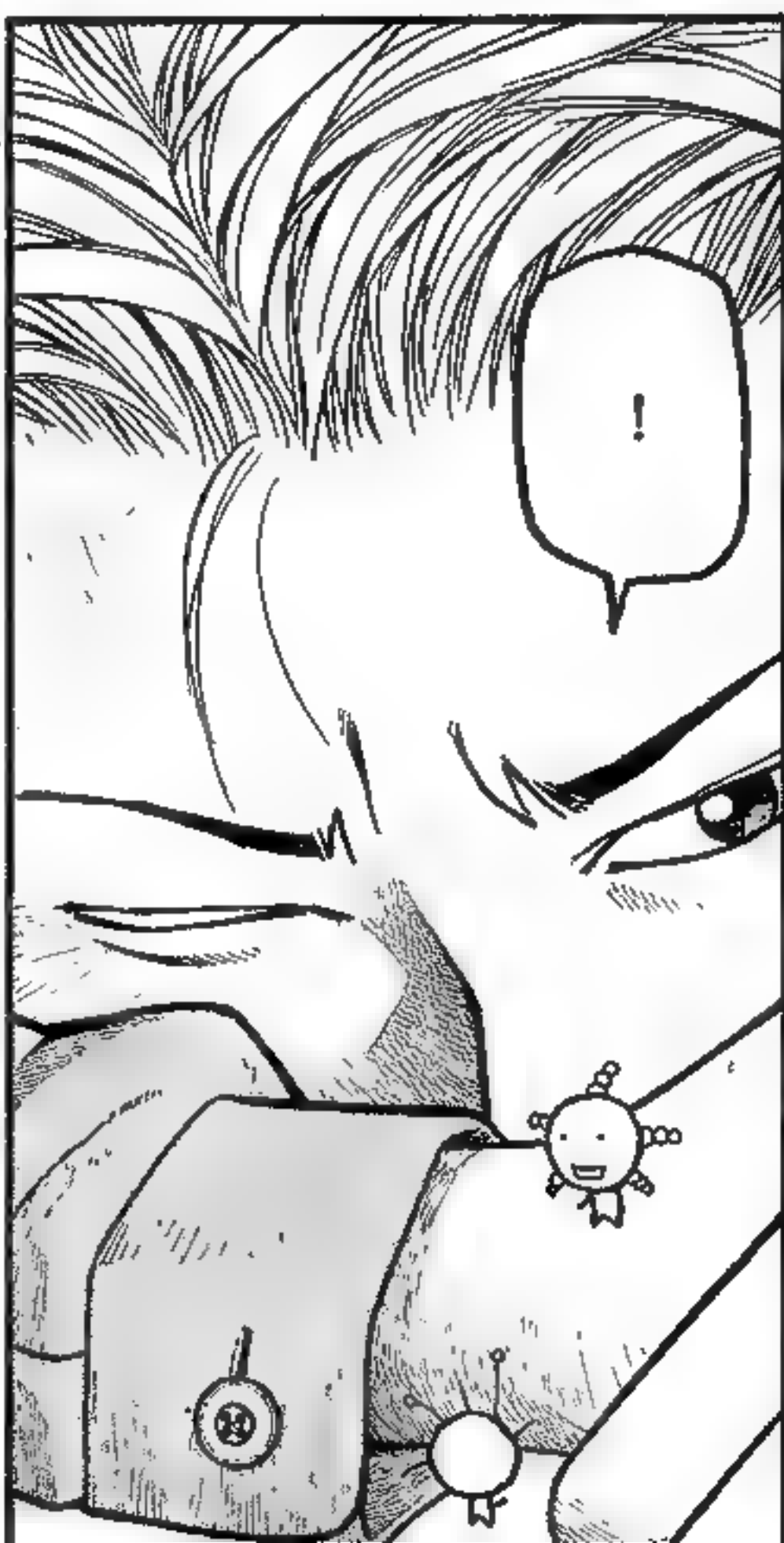
He's the main character. He has the ability to see microbes. As for why, maybe someday (?)



S. cerevisiae
This is yeast. The boils on its face are the traces of its family members.



Kei Yuuki
He's been Sawaki's friend since they were kids. His parents run a sake brewery. He hates hock bacteria to death.



A. oryzae
It's also known as yellow koji mold.





WHOA...
IT'S PITCH
BLACK IN
HERE.

SAWAKI,
ARE YOU
UP?



WELL, THE
OTHERS ARE
ASLEEP, SO I
THOUGHT I'D
GO NOW WHILE
I HAVE A
CHANCE.

I'LL BE
BACK
SOON.



I'M GONNA
SWING BY
PROFESSOR
ITSUKI'S LAB,

ALTHOUGH I
DON'T KNOW
IF HE'S STILL
HERE.



Rub
Rub

COME TO
THINK OF IT,
WE LEFT OUR
STUFF THERE.

BUT WE
CAN JUST GO
TOMORROW.



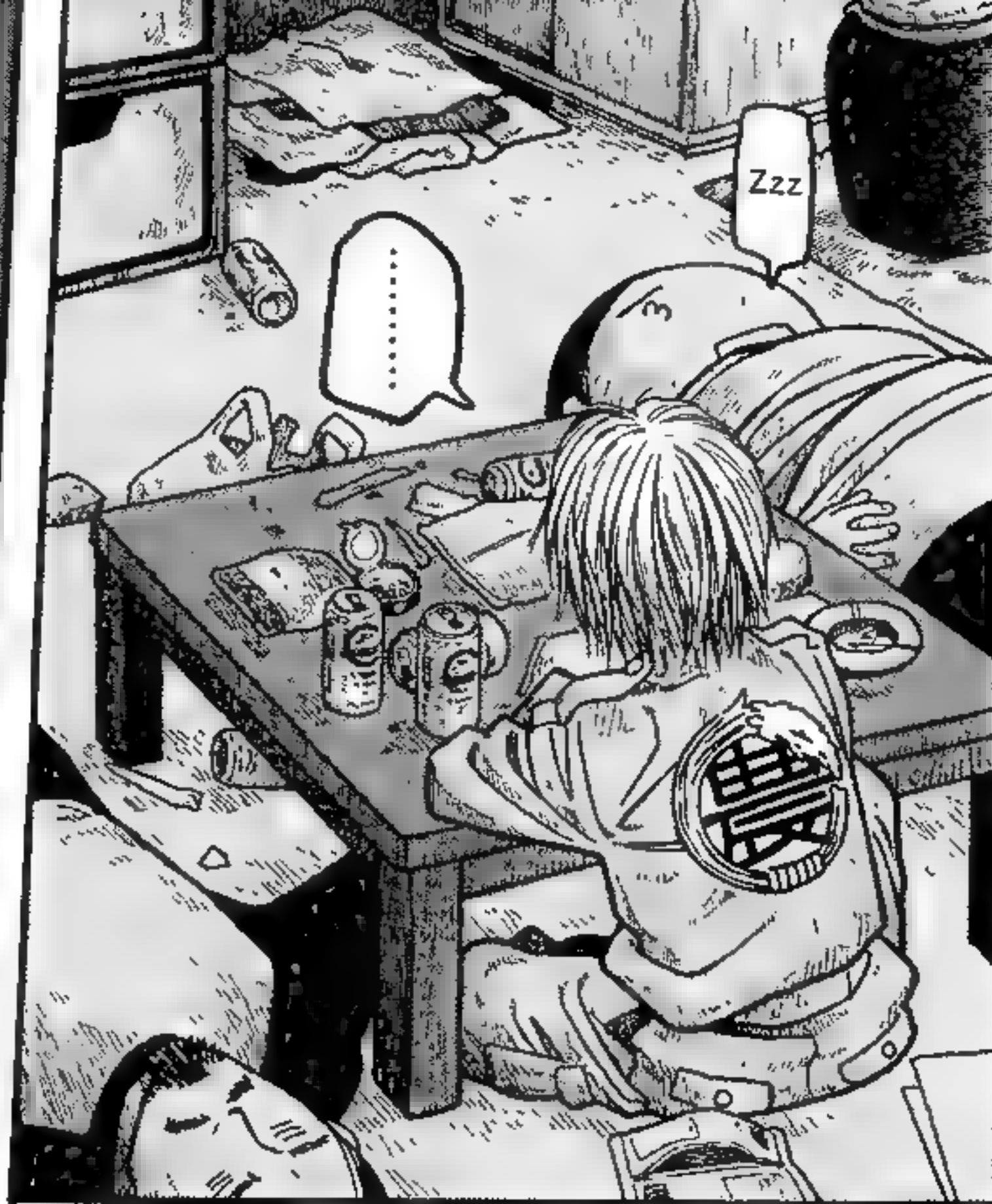
Shut



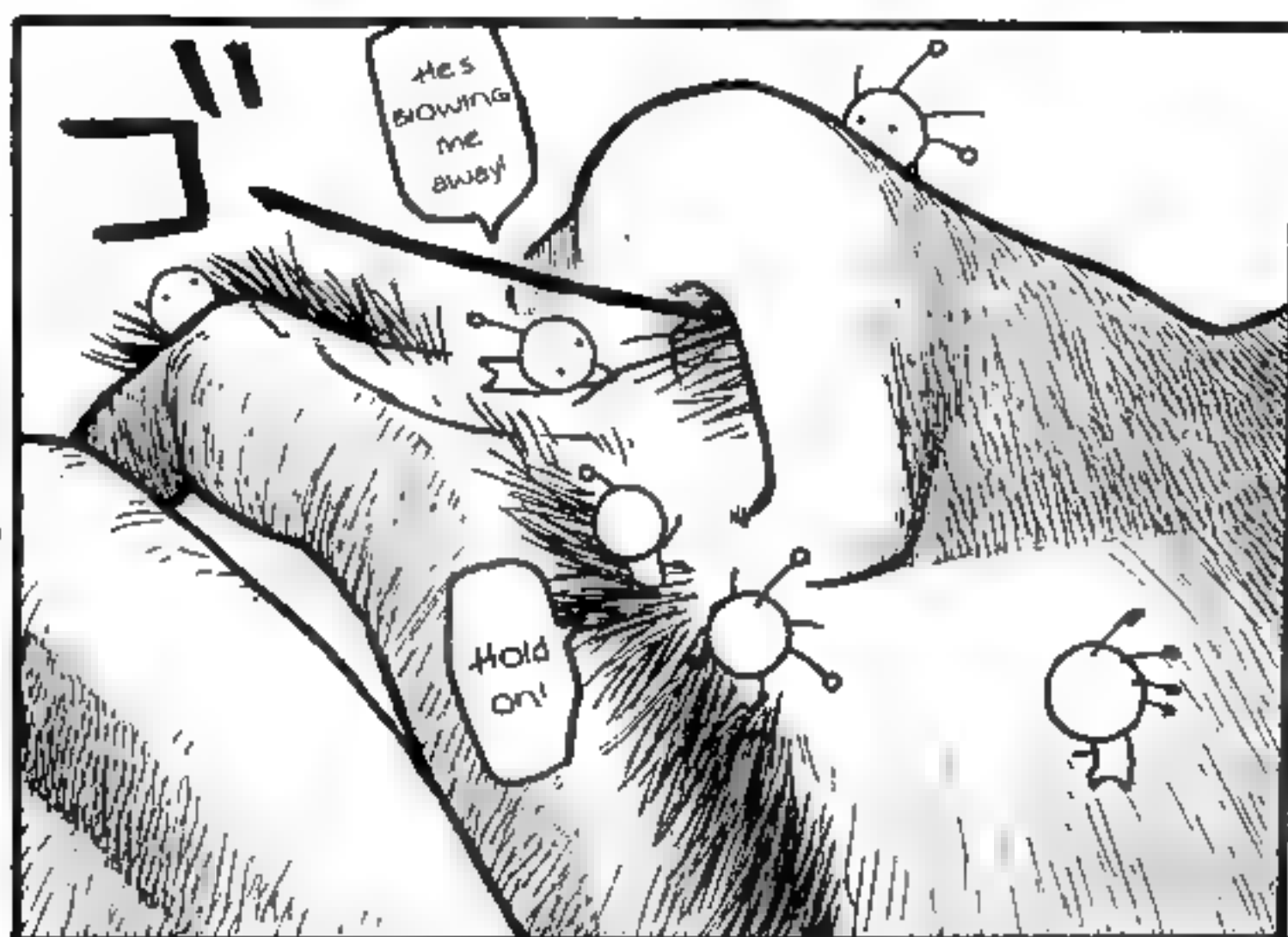
A. niger
It's the central figure in the citric acid demand.



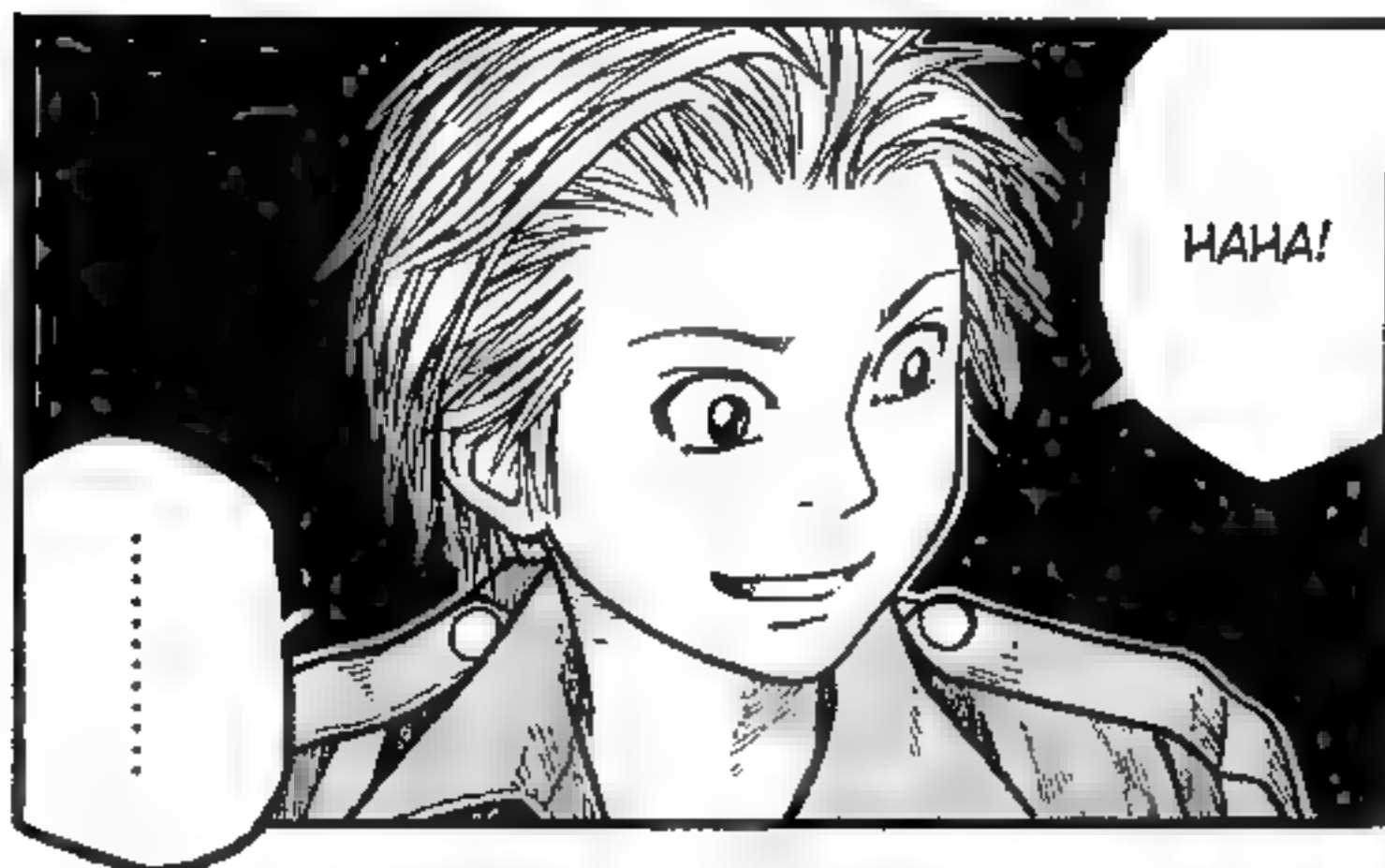
P. chrysogenum
It's the basis for penicillin

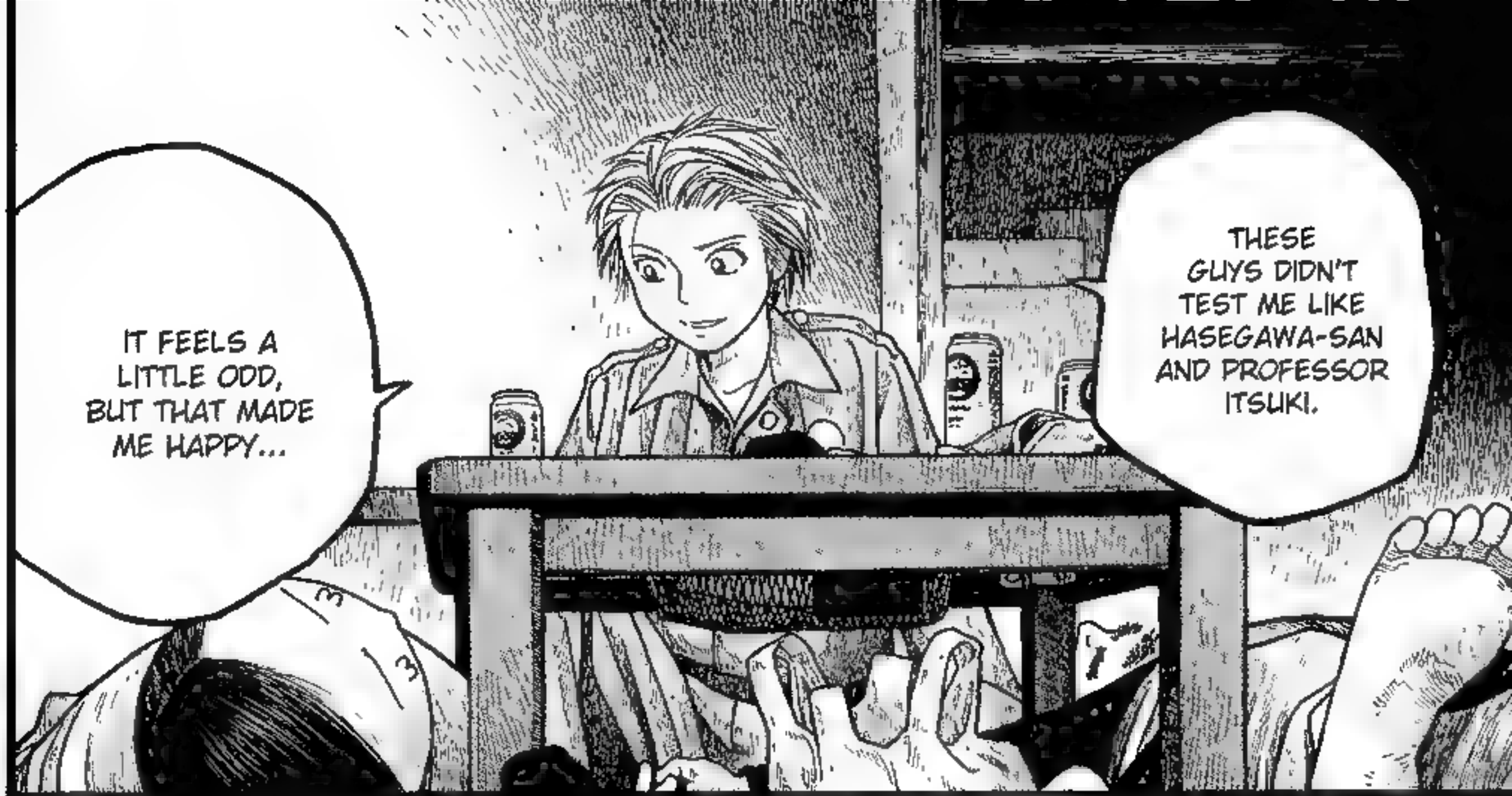


M. mucedo
It has a lot of influential friends



R. japonicus
It participates in brewing alcohol in China.





IT FEELS A
LITTLE ODD,
BUT THAT MADE
ME HAPPY...

THESE
GUYS DIDN'T
TEST ME LIKE
HASEGAWA-SAN
AND PROFESSOR
ITSUKI.



EVEN THOUGH
HE CAN'T SEE
ANYTHING, IT'S
SO CREEPY THAT
HE SAYS HE CAN
SEE THEM!

SENSEI,
SAWAKI-KUN'S
WEIRD!



YOU
CAN SEE
MICROBES
...?

IF YOU'RE NOT
GONNA EAT IT,
THEN JUST
SAY SO.
WHY DO YOU
HAVE TO LIE?

Eat
this and
cheer up!

What's
wrong
Tadayasu?



SAWAKI-SAN'S
TADAYASU IS A
LITTLE STRANGE.

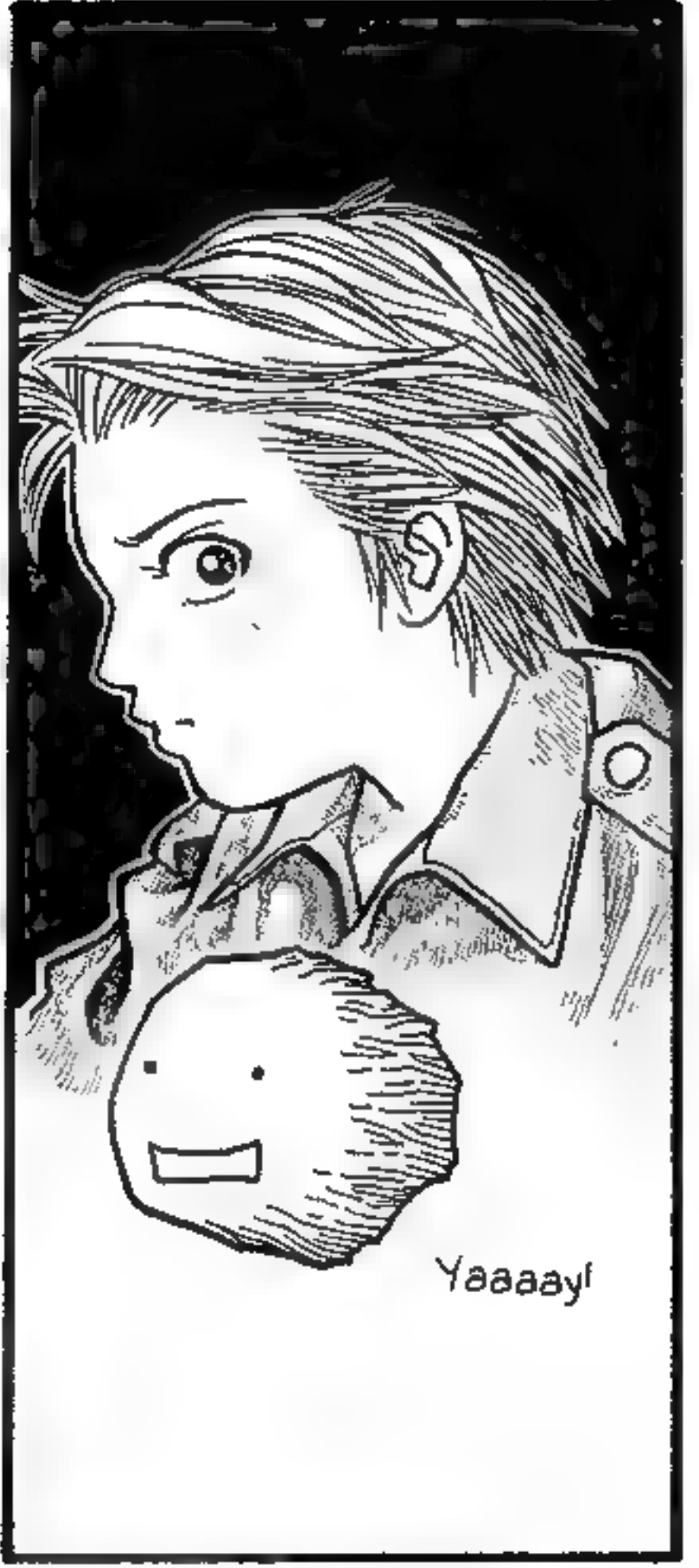
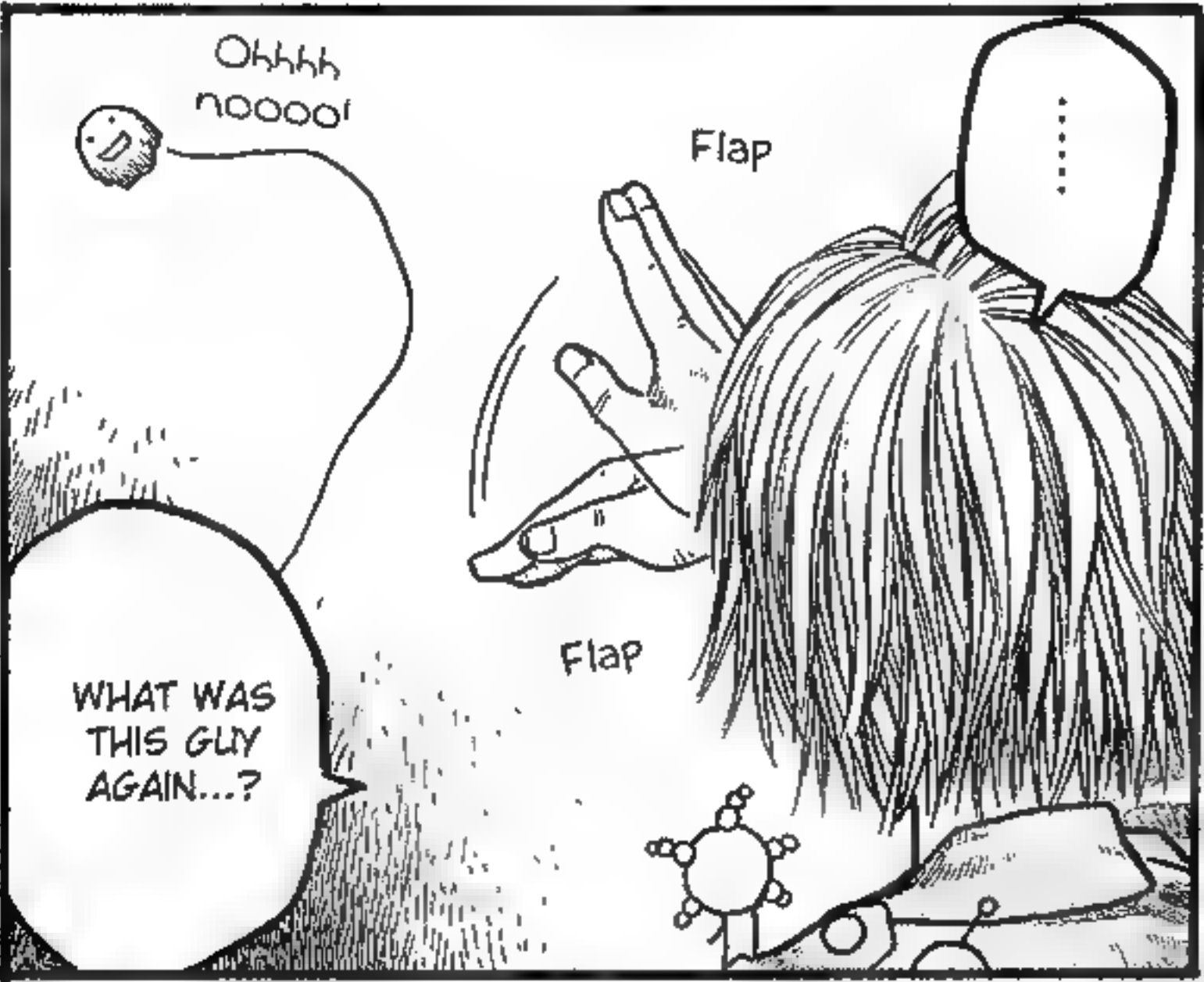
WELL, KIDS
OFTEN SAY
THINGS FOR
ATTENTION.

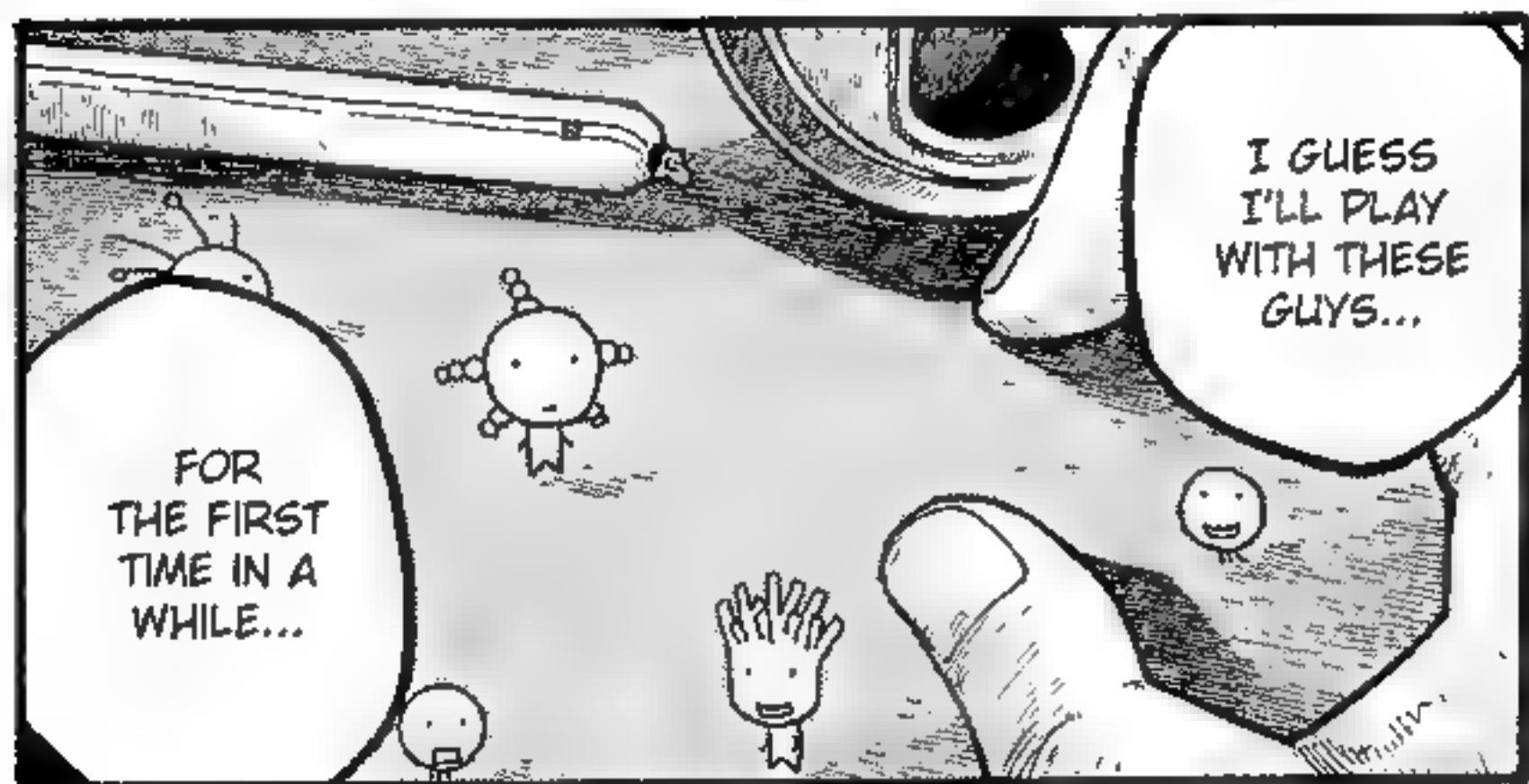
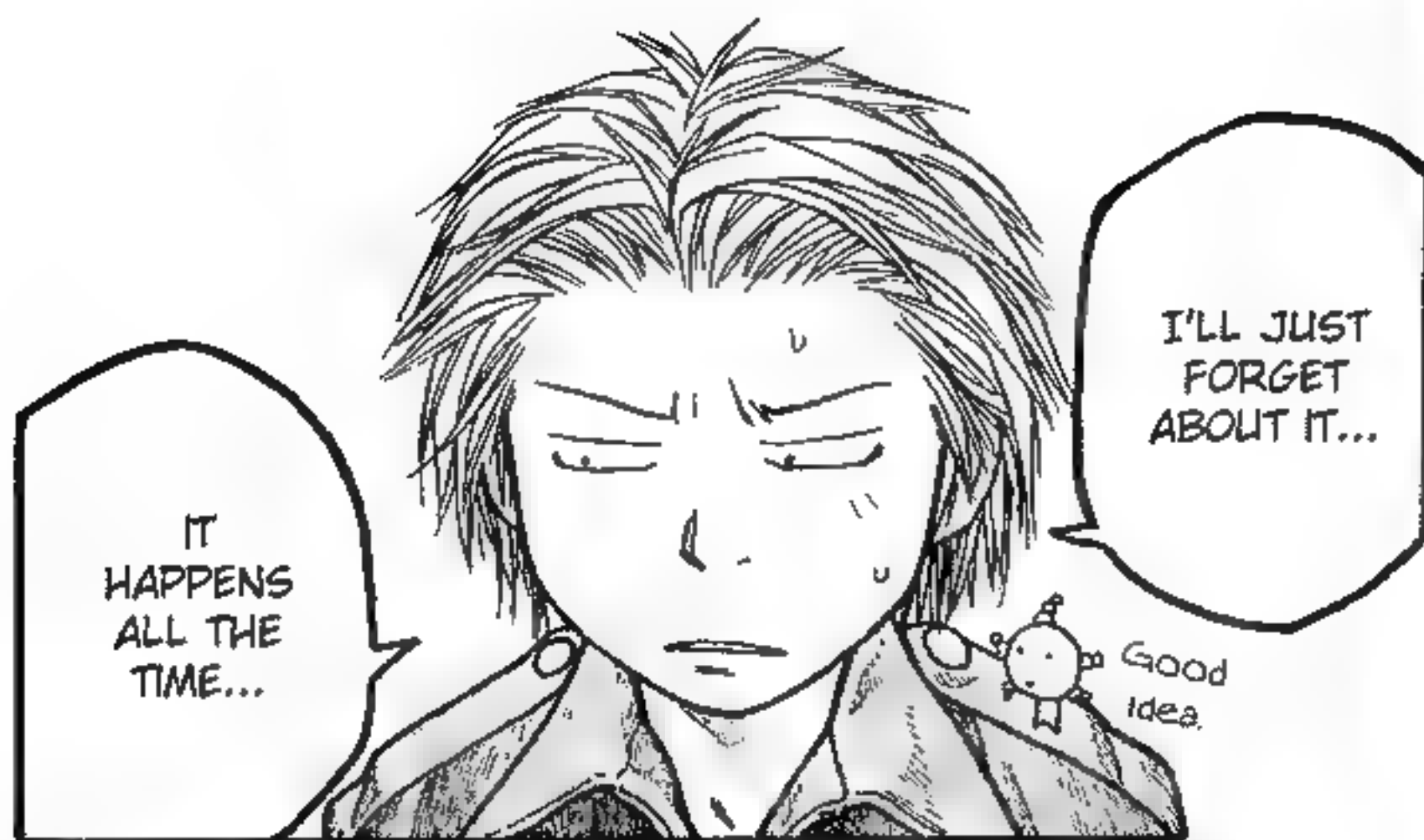


A. sojae
It's a
mature
guy that
talks
about
flavor.



Rhinovirus
It causes
slight fevers
around
37°C and a
head cold.
It has easily
over 100
relatives







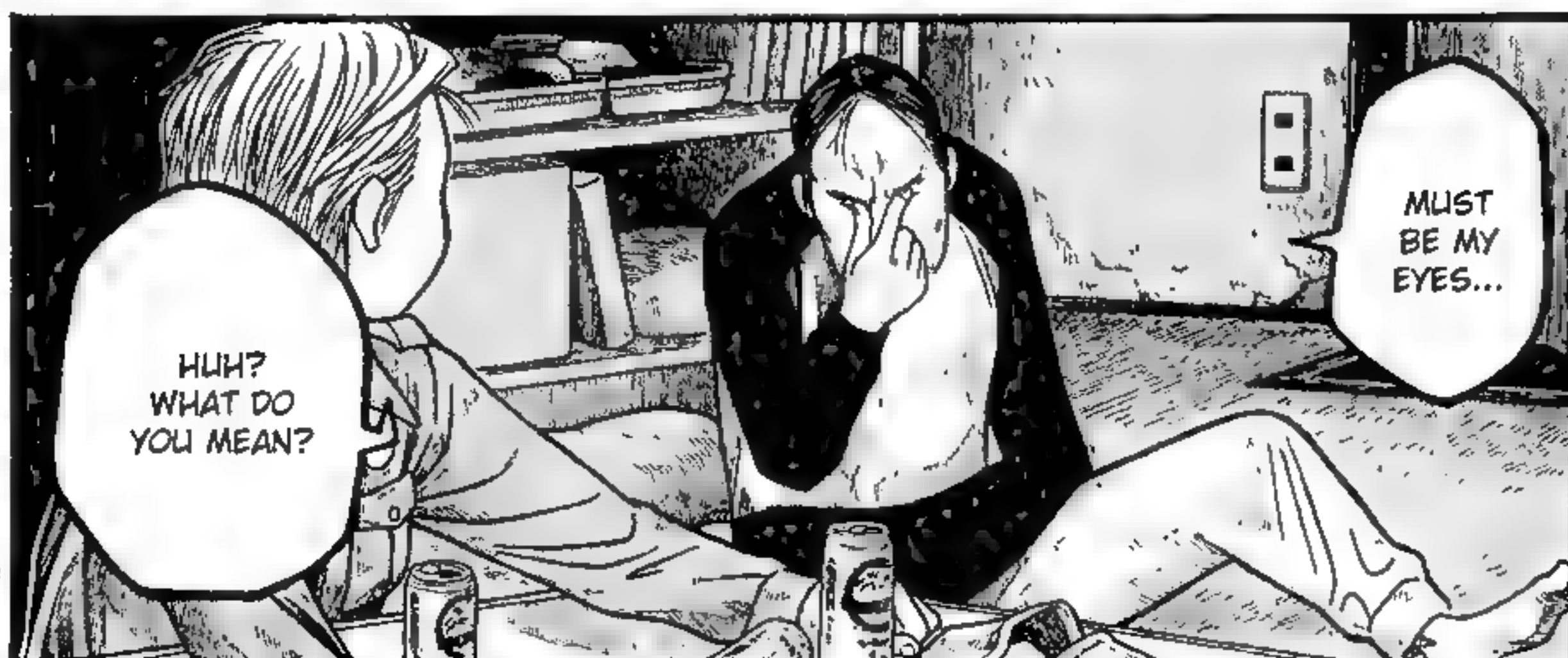
Kaoru
Misato

He's a
second-year
He likes
sake, but
he failed at
homebrewing
it. Is that
because his
room is so
dirty and full
of mold?



Takuma
Kawahama

He's a
second-year
and Misato's
friend.
It seems
like he has
different
habits
compared to
Misato, as
well as unique
tastes.







Keizou
Itsuki

He's a professor at a certain agricultural university. He'll probably say a lot to Sawaki and his friends from now on.

HOW ARE YOU PLANNING ON HANGING OUT WITH SAWAKI FROM HERE ON OUT?

YOU MUST HAVE IT TOUGH, TOO.



Haruka
Hasegawa

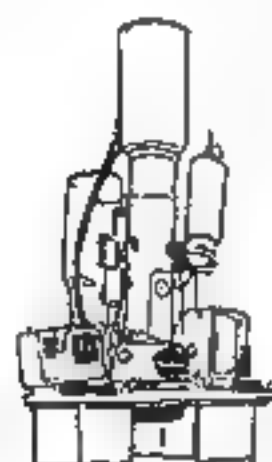
She's a graduate student at a certain agricultural university. She's Professor Itsuki's arms and legs, so to speak. She got embarrassed after Sawaki exposed that she has athlete's foot.

THAT'S NOT WHAT I MEANT.

I'LL GIVE YOU A PIECE OF GOOD ADVICE.

OUR FAMILIES RUN A SAKE BREWERY AND A MOLD-STARTER SUPPLIER, SO I THINK WE'LL BE TOGETHER FOR OUR ENTIRE LIVES.

HOW...? THERE'S NO PROBLEM AT ALL.



TEM

This is an impressive microscope.

IT'S PROPORTIONATE TO ALL OF THE EQUIPMENT IN THE TEM ROOM, WORTH 300 MILLION YEN.

IF I WERE TO LIKEN THAT KID'S ABILITY TO SOMETHING WE HAVE AT THIS UNIVERSITY,



There won't be a chapter next time to allow the author to recover. Please send letters of encouragement. (Ed.)



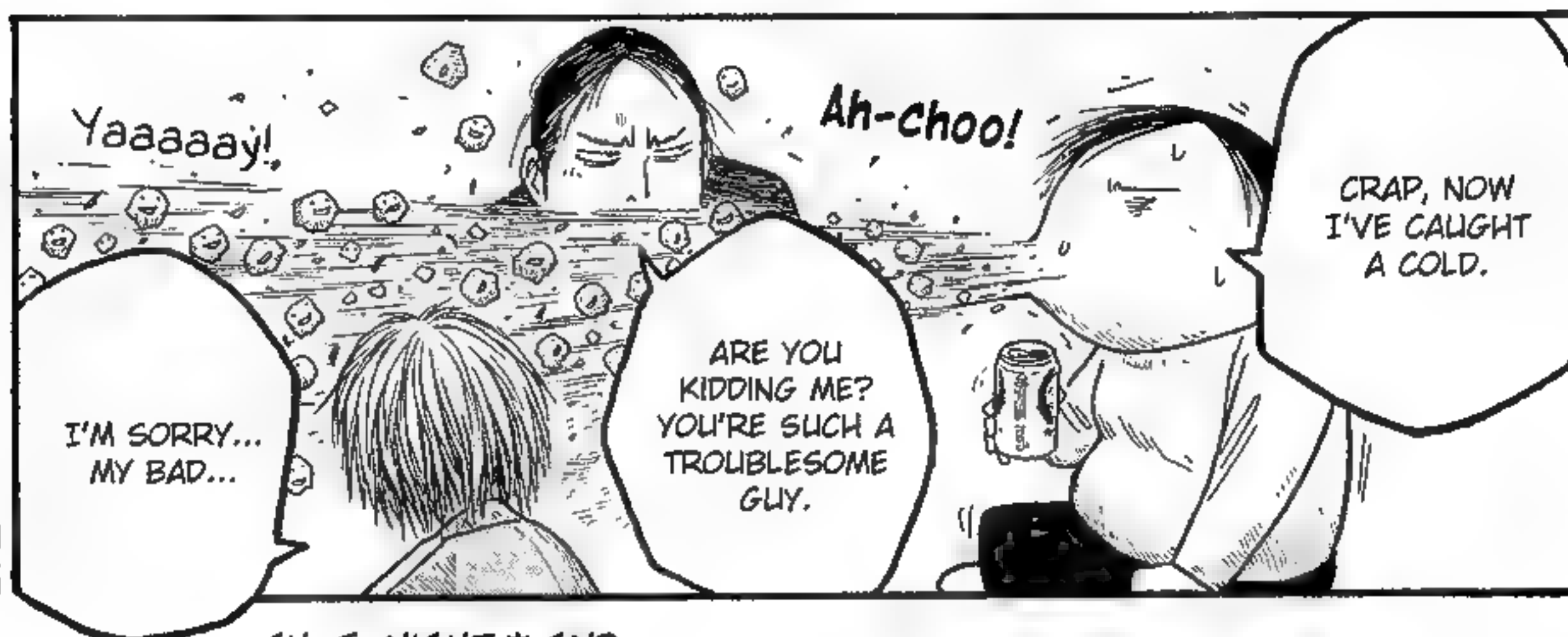
300
MILLION...?

NO
WAY...



IF OTHERS
FOUND OUT
ABOUT HIS
ABILITY,

PROFESSOR
ITSUKI, GOATEE OR
FATSO WOULDN'T
BE THE ONLY ONES
WHO'D WANT TO
MAKE USE OF IT.



Yaaaaay!

Ah-choo!

CRAP, NOW
I'VE CAUGHT
A COLD.

I'M SORRY...
MY BAD...

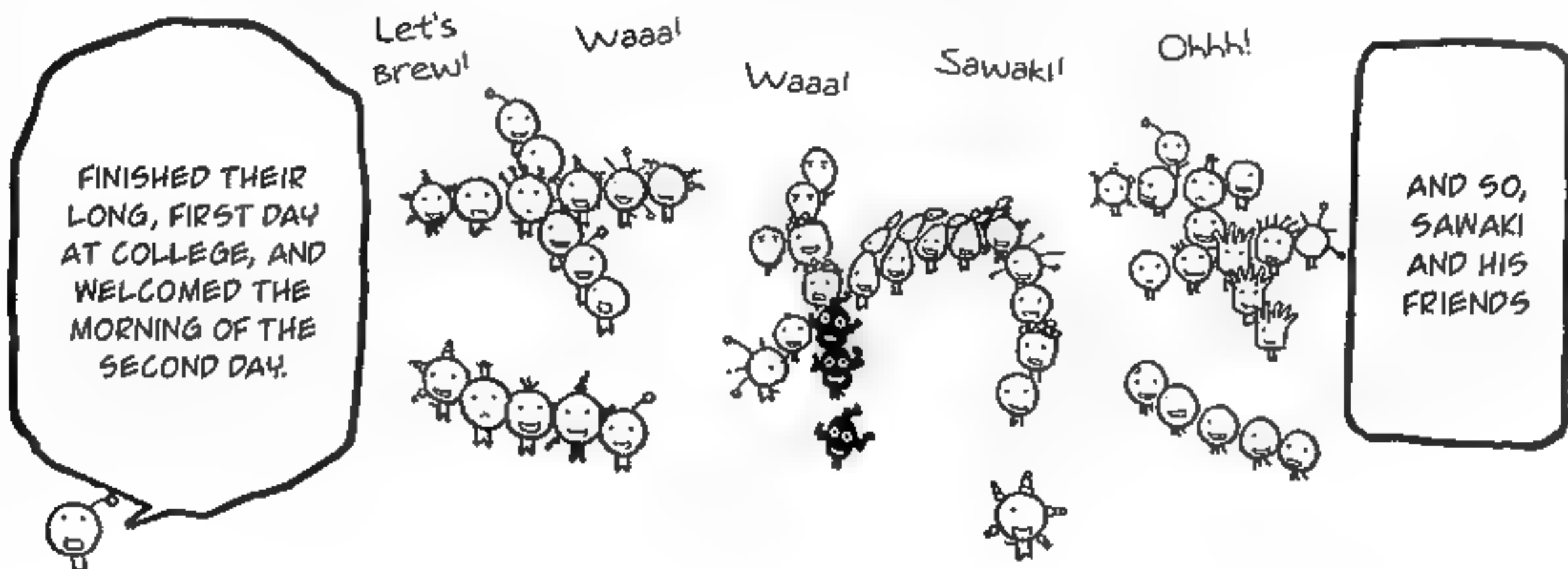
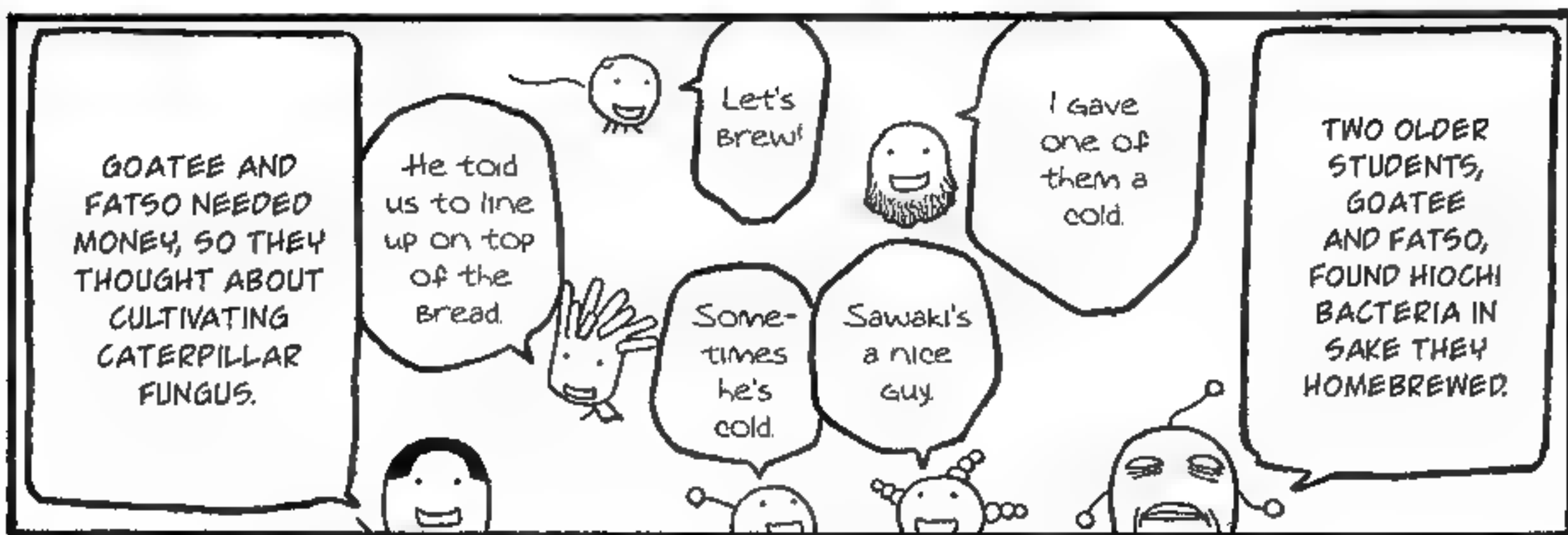
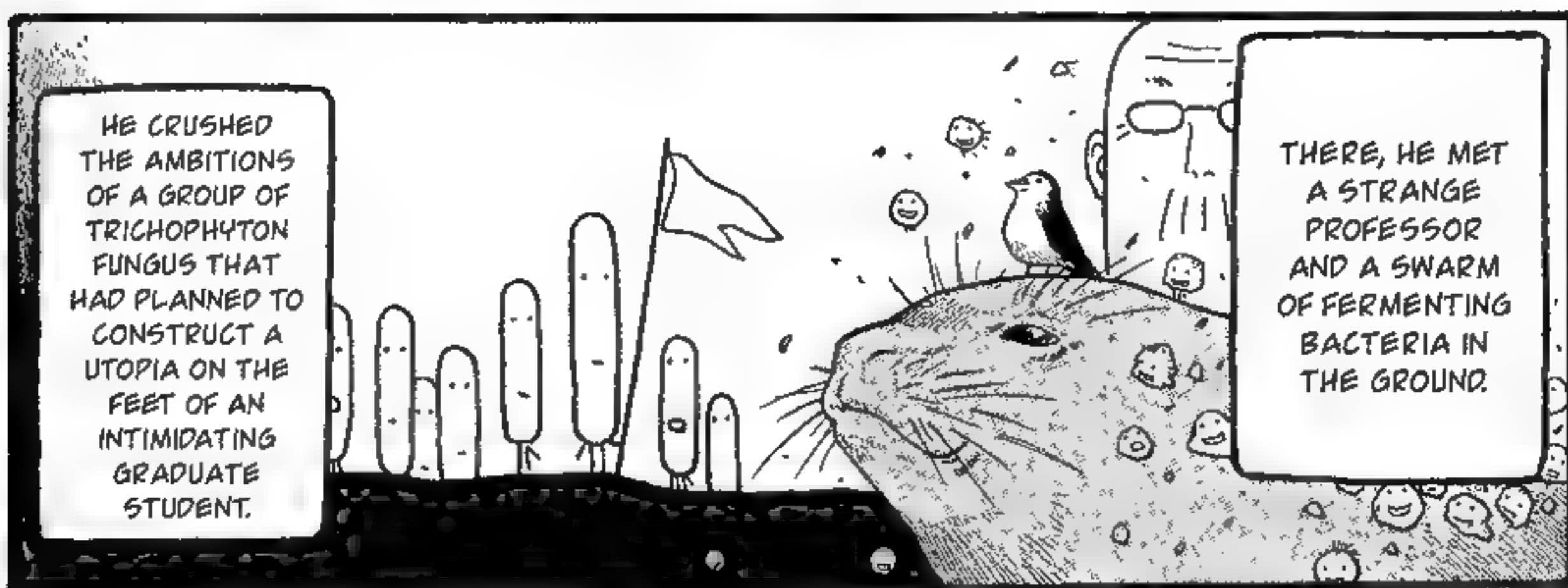
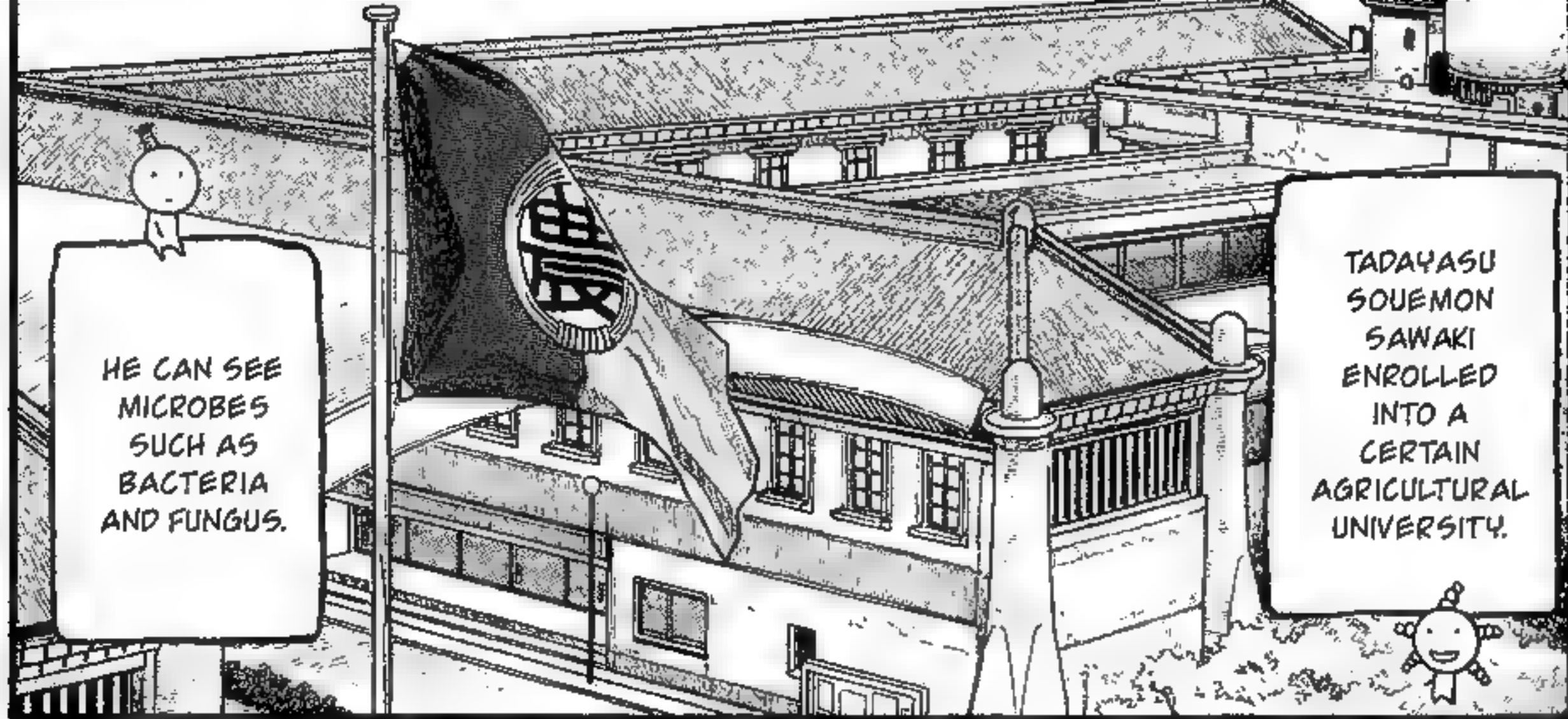
ARE YOU
KIDDING ME?
YOU'RE SUCH A
TROUBLESOME
GUY.

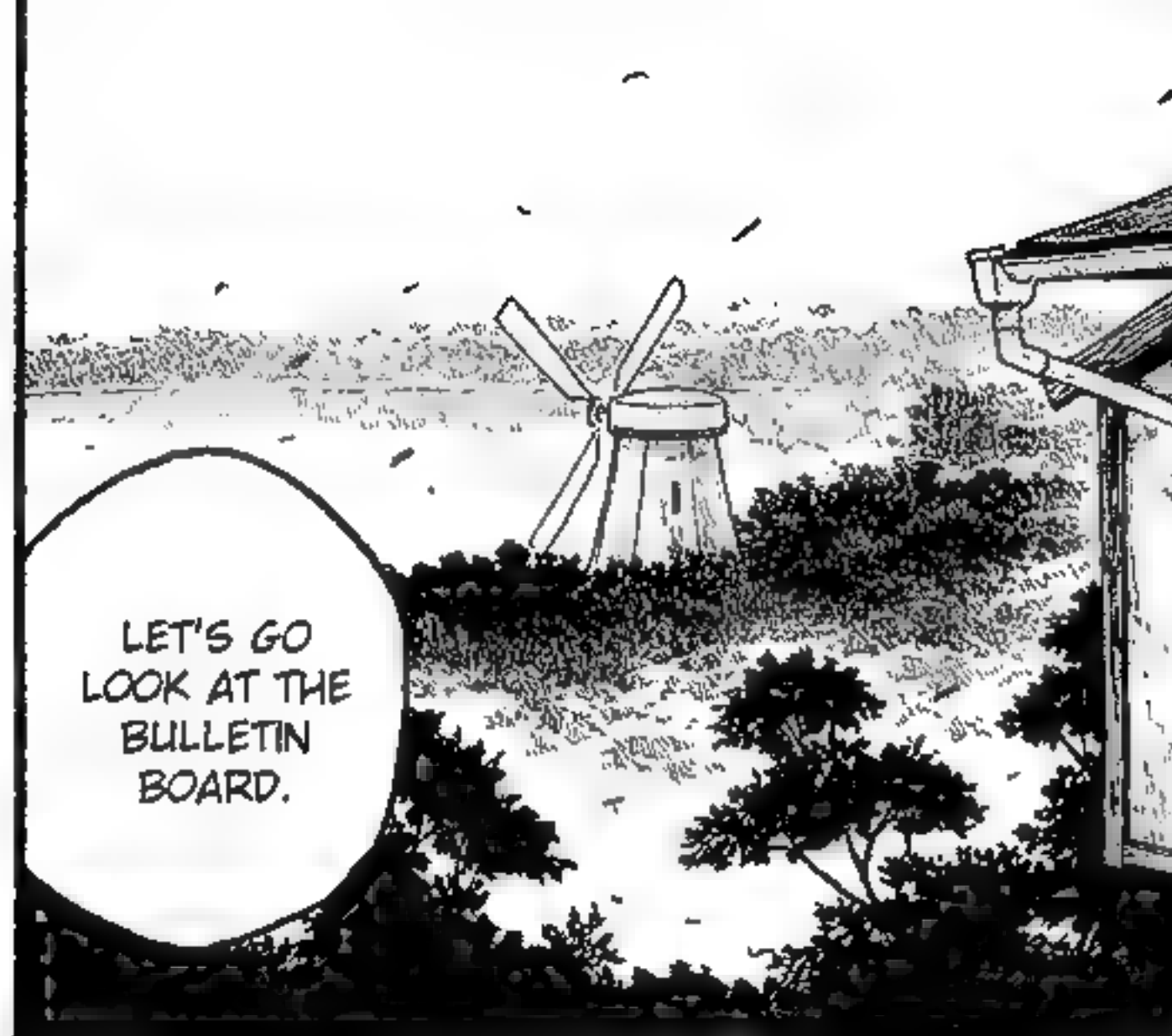


Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com





Tadayasu Souemon Sawaki
He's the main character. For some reason, he can see microbes. "Souemon" is his family's trade name.

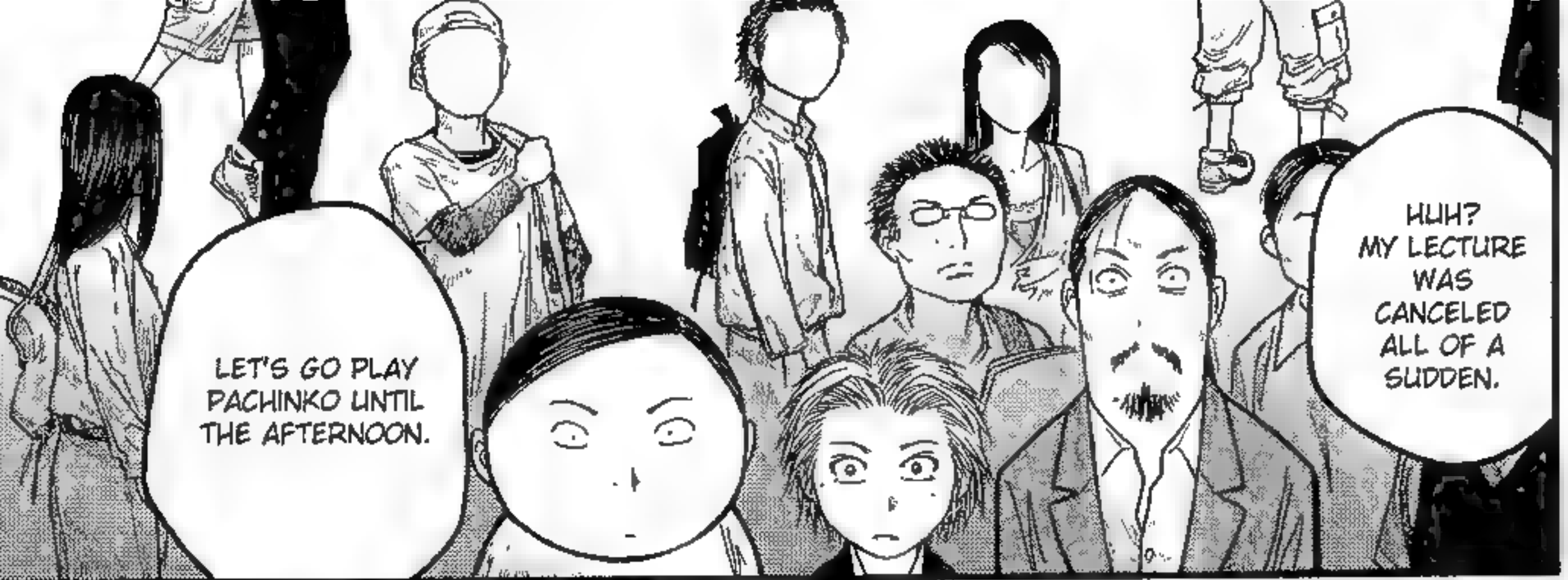


Kaoru Misato
He's a second-year. He loves sake, but it started with sake made from chewed rice. There is also a rumor that he has a fetish for bodily fluids.



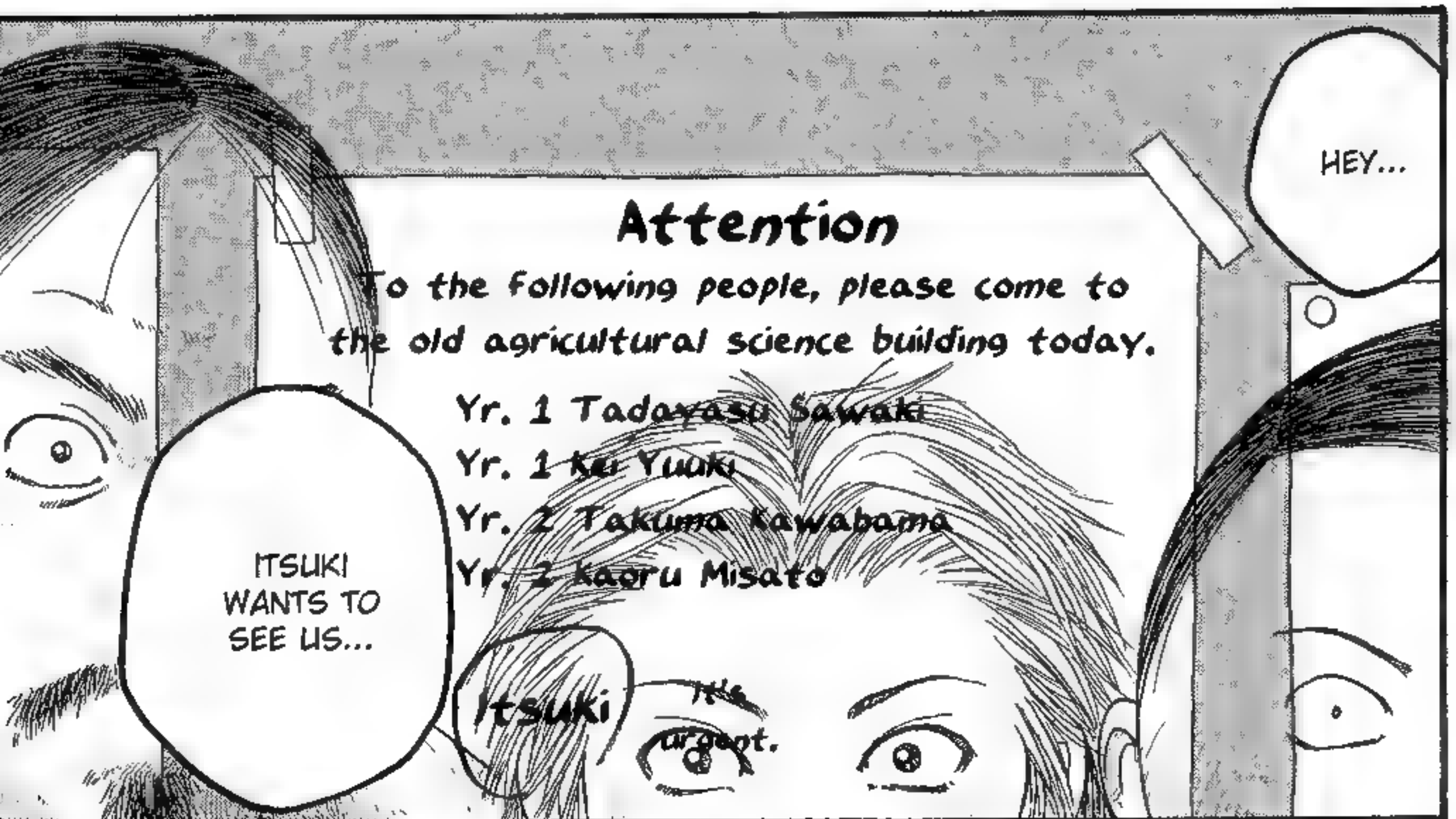
Takuma Kawahama
He's a second-year. The truth is, he uses eyelid glue. He has an unparalleled love for insects, and the reason will come out eventually.





LET'S GO PLAY
PACHINKO UNTIL
THE AFTERNOON.

HUH?
MY LECTURE
WAS
CANCELED
ALL OF A
SUDDEN.



Attention

To the following people, please come to
the old agricultural science building today.

Yr. 1 Tadayasu Sawaki
Yr. 1 Kei Yuuki
Yr. 2 Takuma Kawabama
Yr. 2 Kaoru Misato

ITSUKI
WANTS TO
SEE US...

HEY...

Itsuki

It's
urgent.



WH...WHY
ARE KEI AND I
INCLUDED...?

THIS IS
ABOUT HOW
YOU TWO WERE
HOMEBREWING,
RIGHT...?

The serialization
has restarted!
Sorry for the wait.



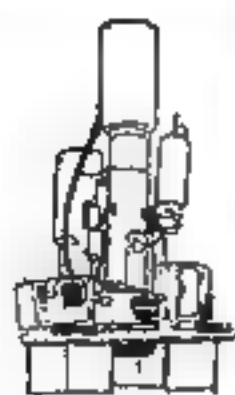
走れ! (Sore!)

The
author has
recovered.
Thank you
very much
for your
letters of
encouragement.

IS THIS OKAY?
VEHICLES AREN'T
ALLOWED OVER
HERE, RIGHT?

IT'S
ALL RIGHT.
I'M A
PROFESSOR.

CH. 6: THE SECOND DAY



TEM

This is an electron microscope. It costs 300 million yen.



Kei Yuuki
He's been Sawaki's friend since they were kids and his parents run a sake brewery. He has bad memories related to h.ochi bacteria.



Haruka Hasegawa
She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She seems to be treating her athlete's foot.

ITSUKI LABORATORY: TEM ROOM

QUIT COMPLAINING!
JUST BE GRATEFUL
THAT YOU GOT TO SEE
A PART OF A GRAD
STUDENT'S URGENT
RESEARCH.

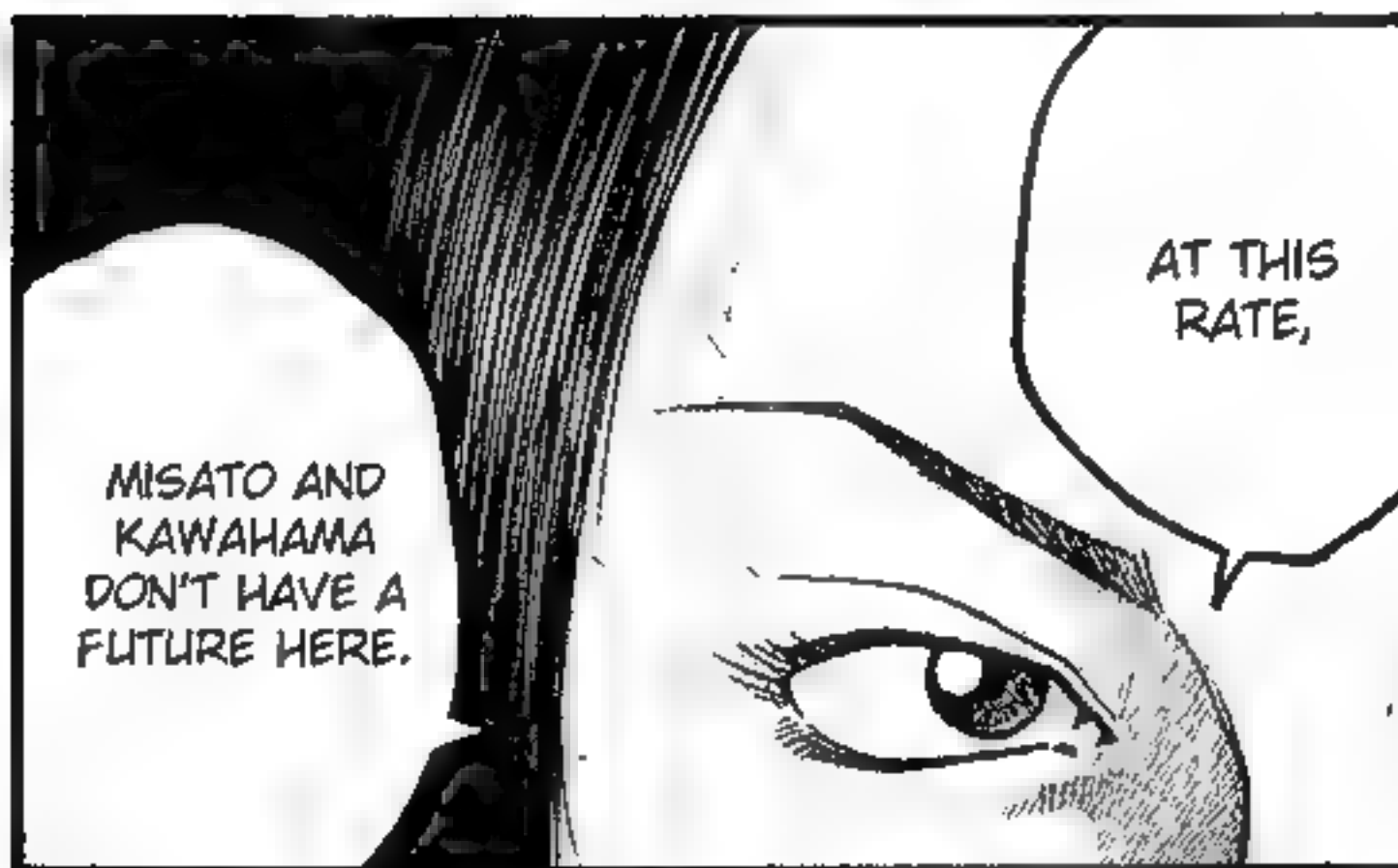
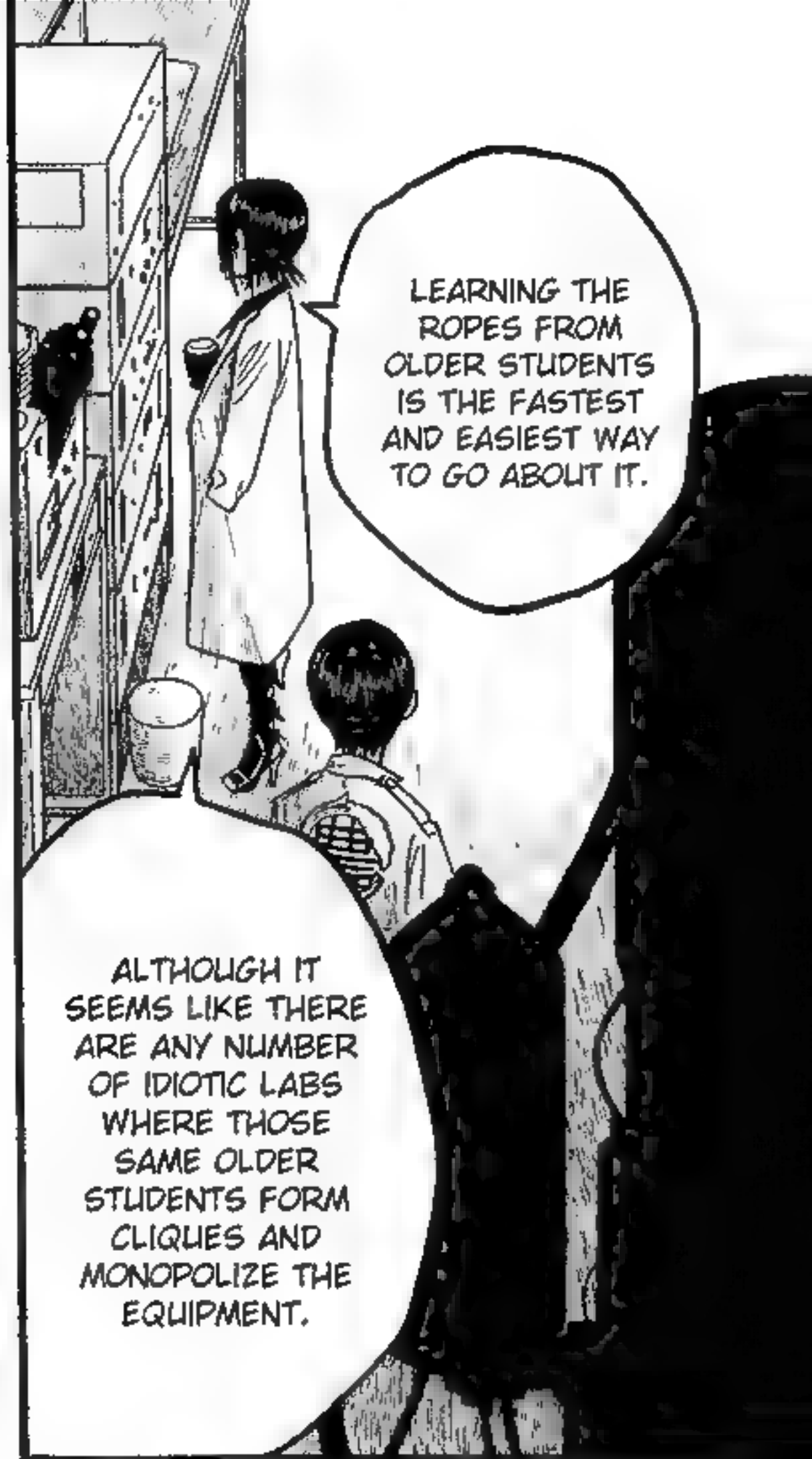
EVEN THOUGH
I ONLY CAME
HERE TO GET
OUR STUFF, YOU
MADE ME HELP
YOU UNTIL THE
MORNING...

THAT SORT
OF STUFF IS
IMPORTANT.

THERE AREN'T
ANY STUDENTS
WHO COULD USE
EQUIPMENT LIKE
THIS BY JUST
LOOKING AT
THE MANUAL.

ALTHOUGH
I DID LEARN
A LITTLE
ABOUT THIS
EQUIPMENT...

I JUST
ENROLLED
YESTERDAY.
I DIDN'T
UNDERSTAND
WHAT YOU
WERE DOING!



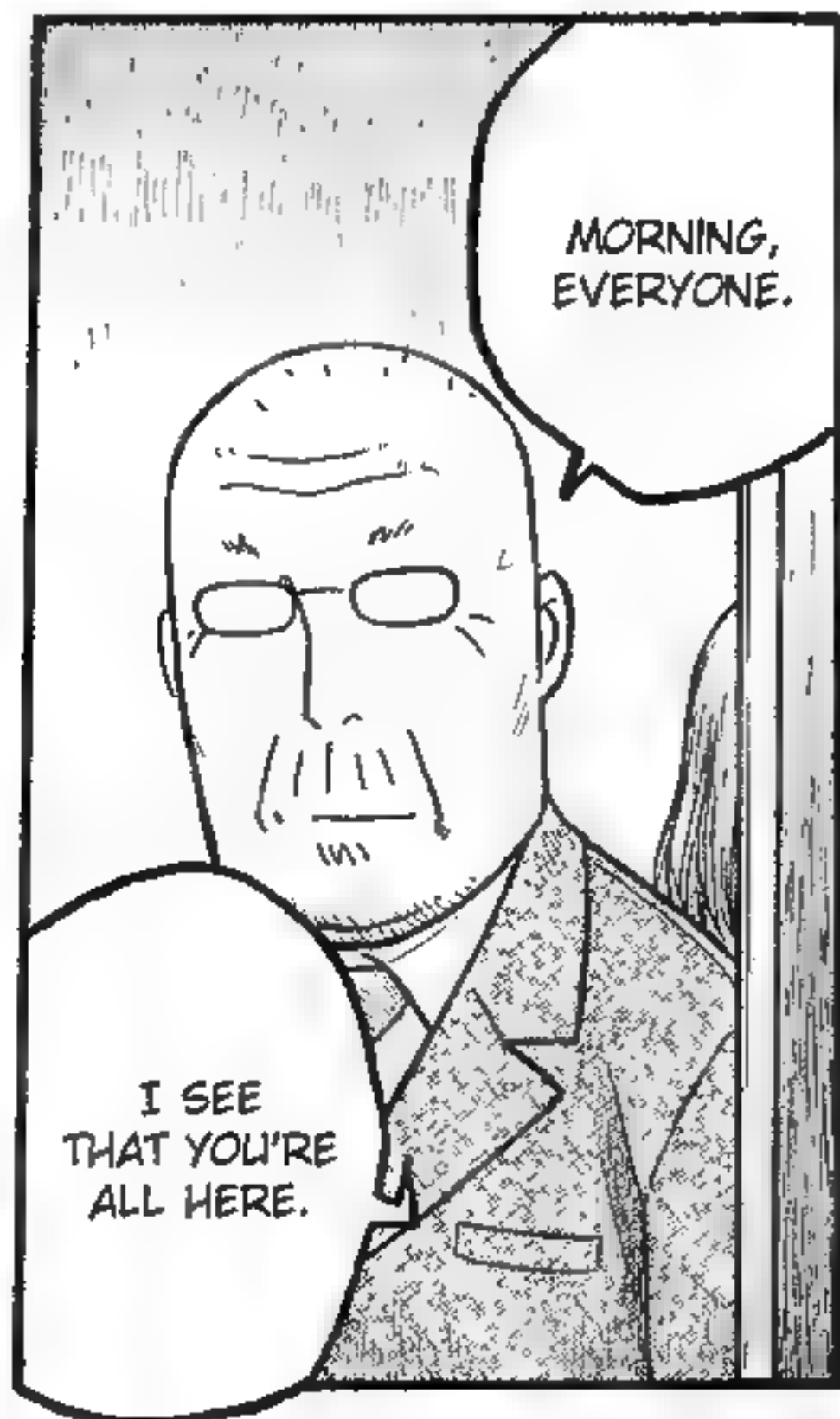
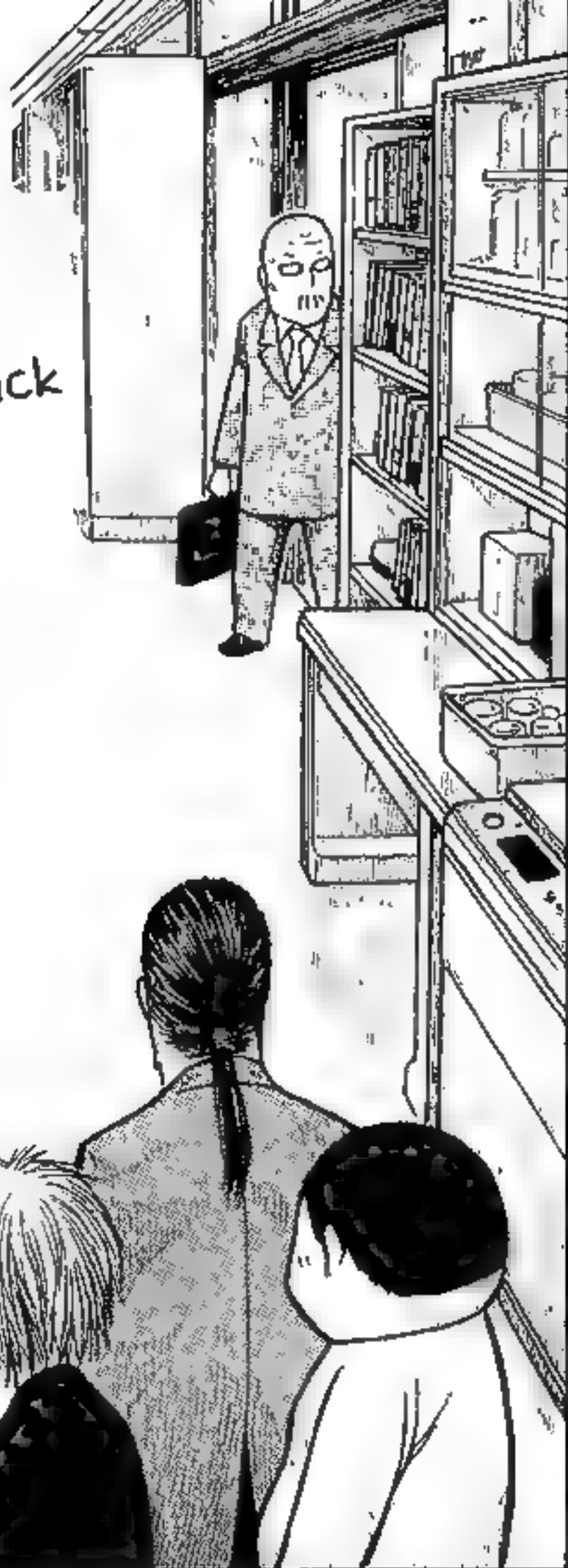


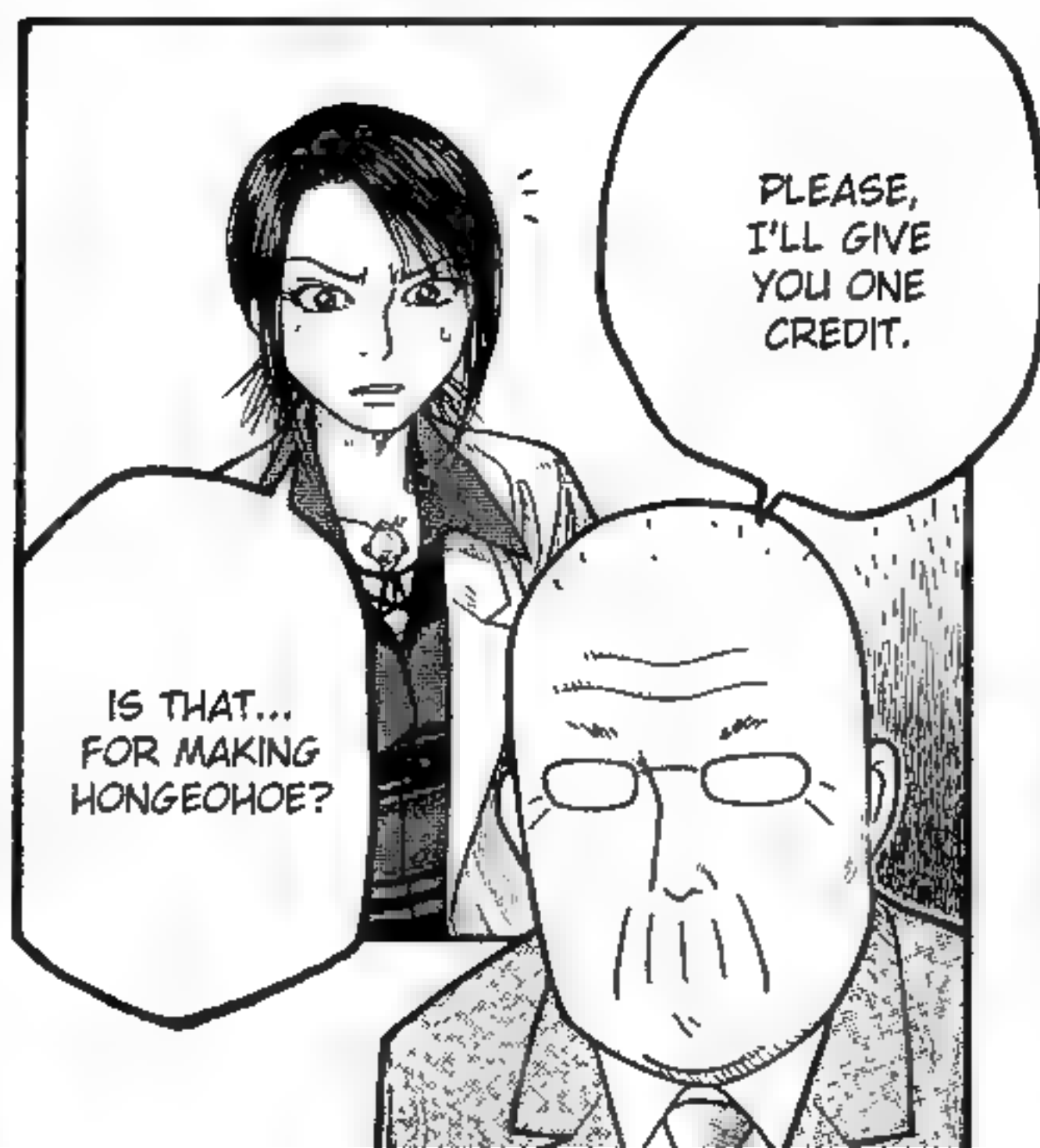
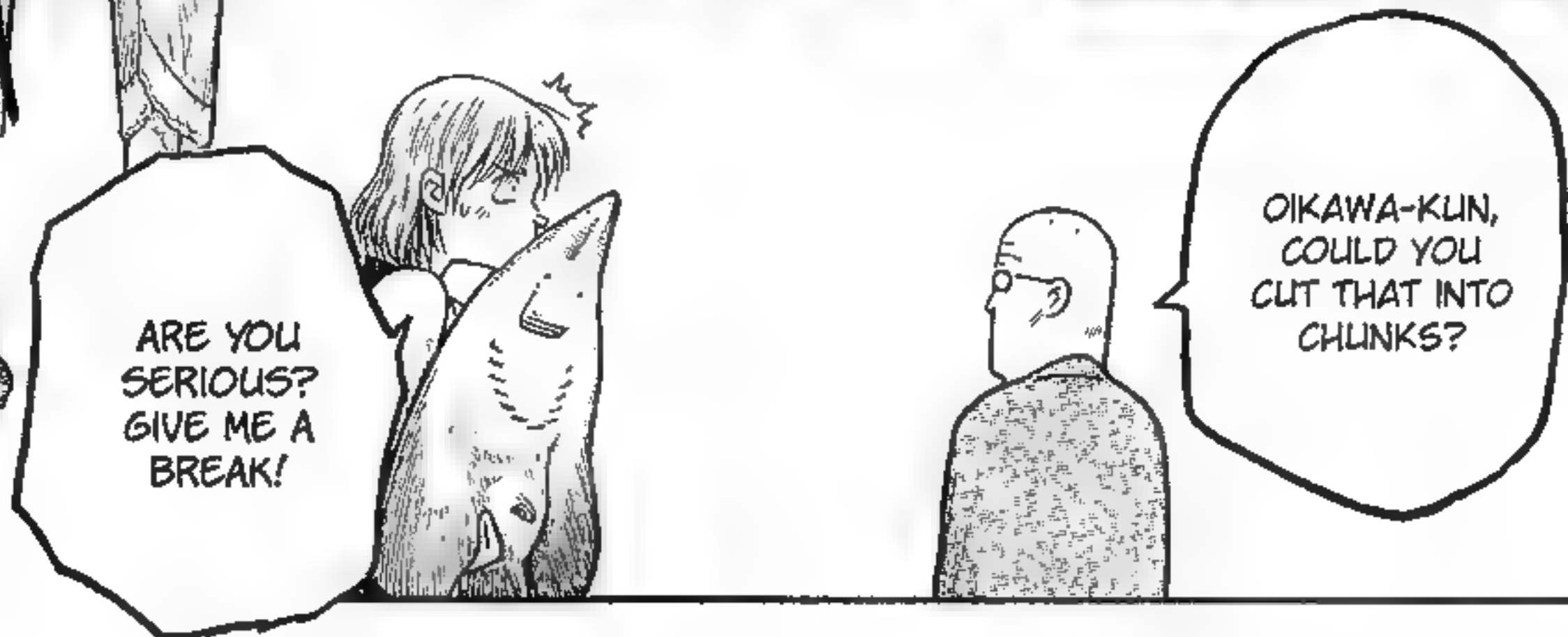
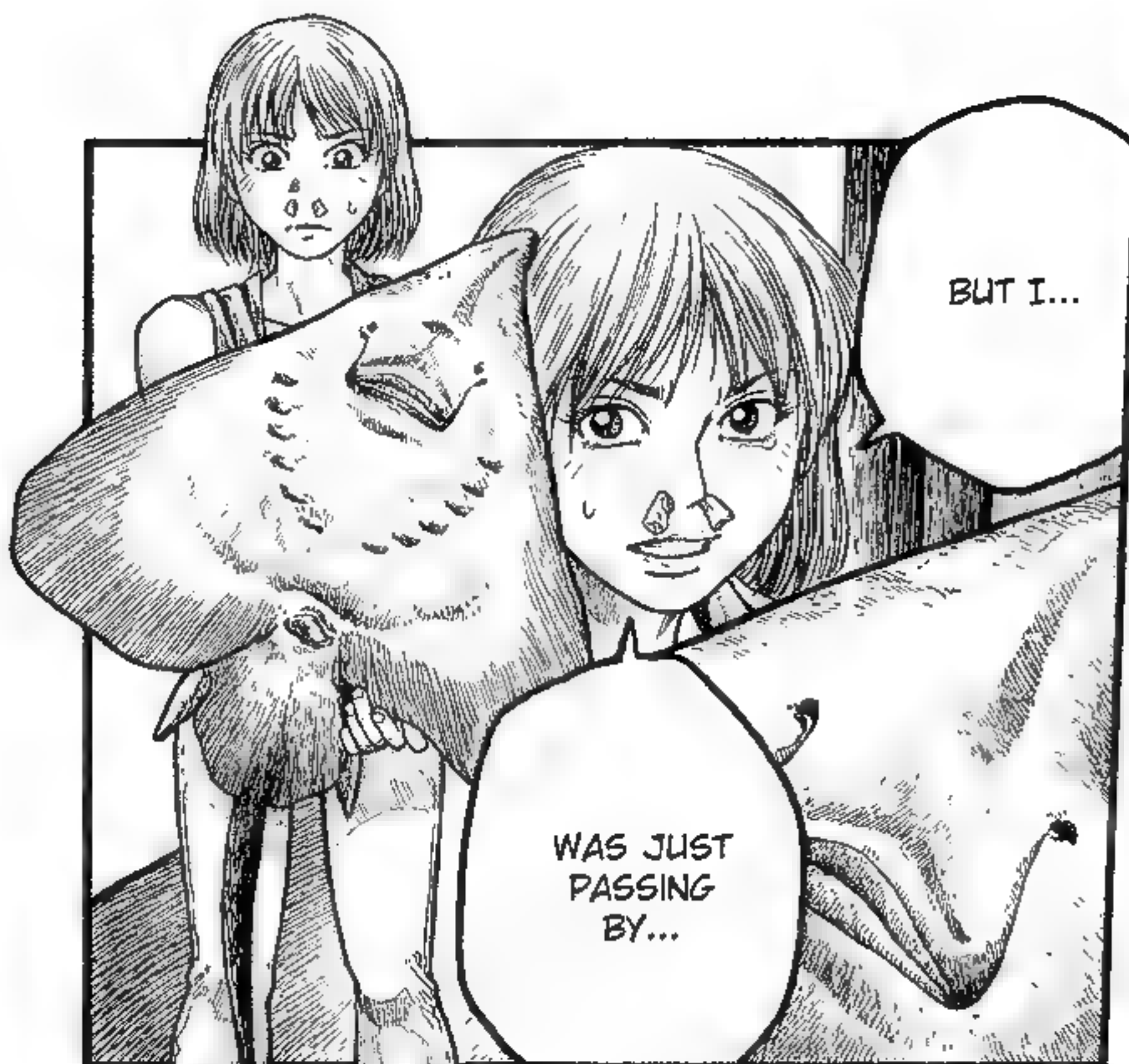
Keizou Itsuki
He's a professor at a certain agricultural university. This chapter, his hidden passion comes out.

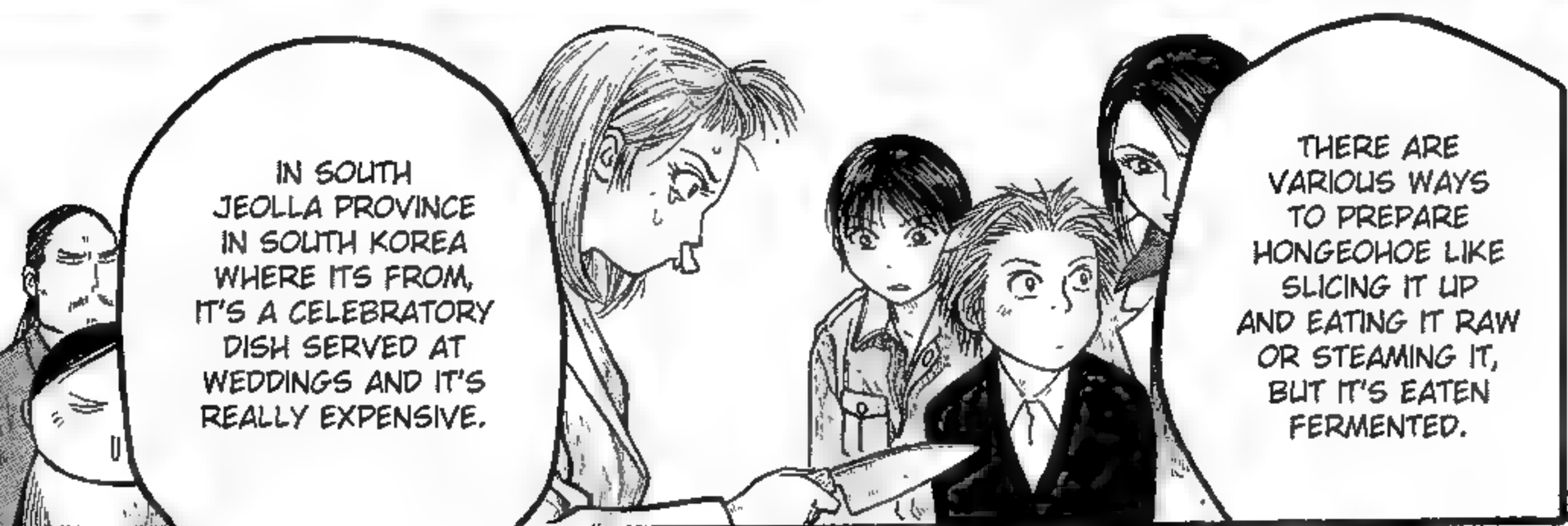
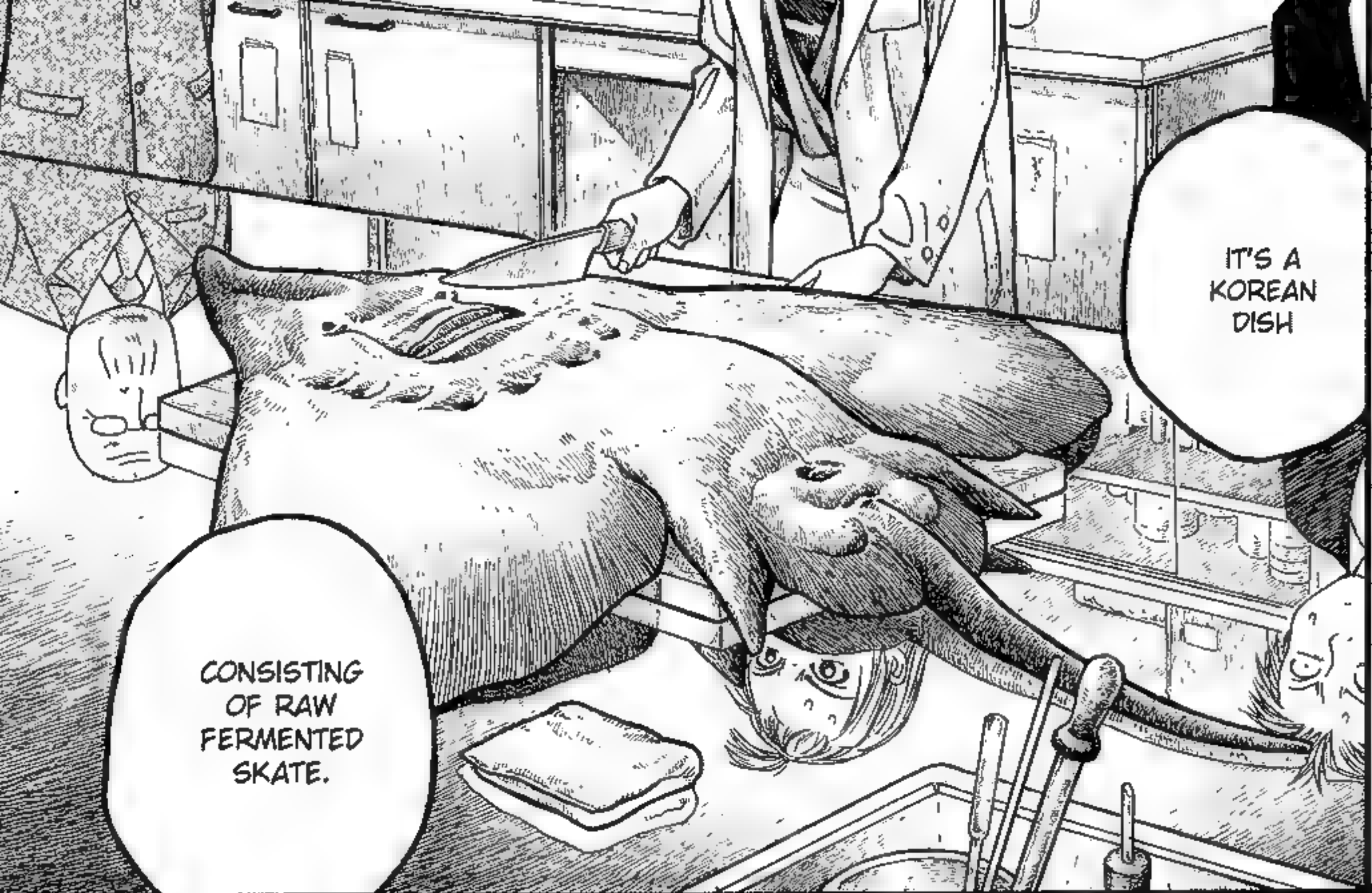


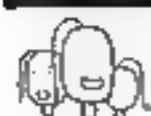
Hazuki Oikawa
She's a first-year. This is her first appearance. Although she says Professor Itsuki hit on her, the professor probably just wanted to ride with her because the campus is so vast. The campus isn't a public road, so it's okay to ride without a helmet.

Click





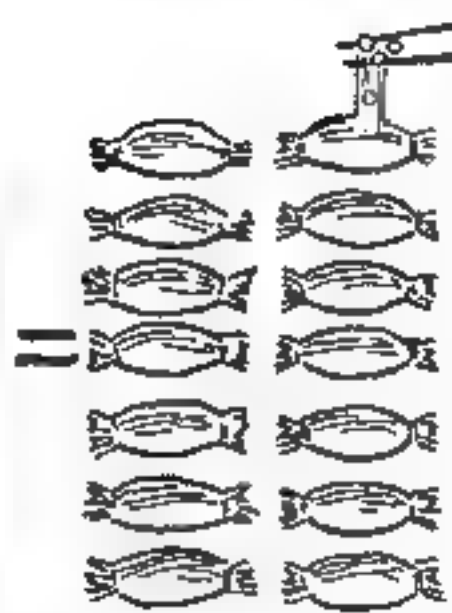
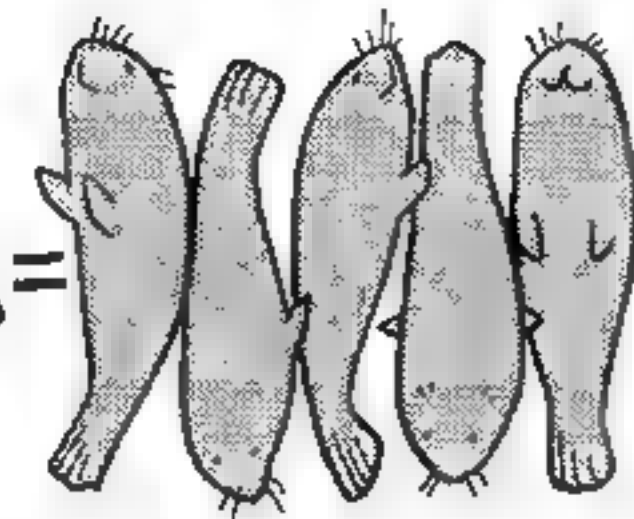




B. halodurans and others in the *Bacillus* genus
Most alkaliphilic bacteria are these guys.

Hongeochoe

AND IT'S
THE SECOND-
SMELLIEST
FERMENTED
FOOD IN THE
WORLD.



14 packets
of natto

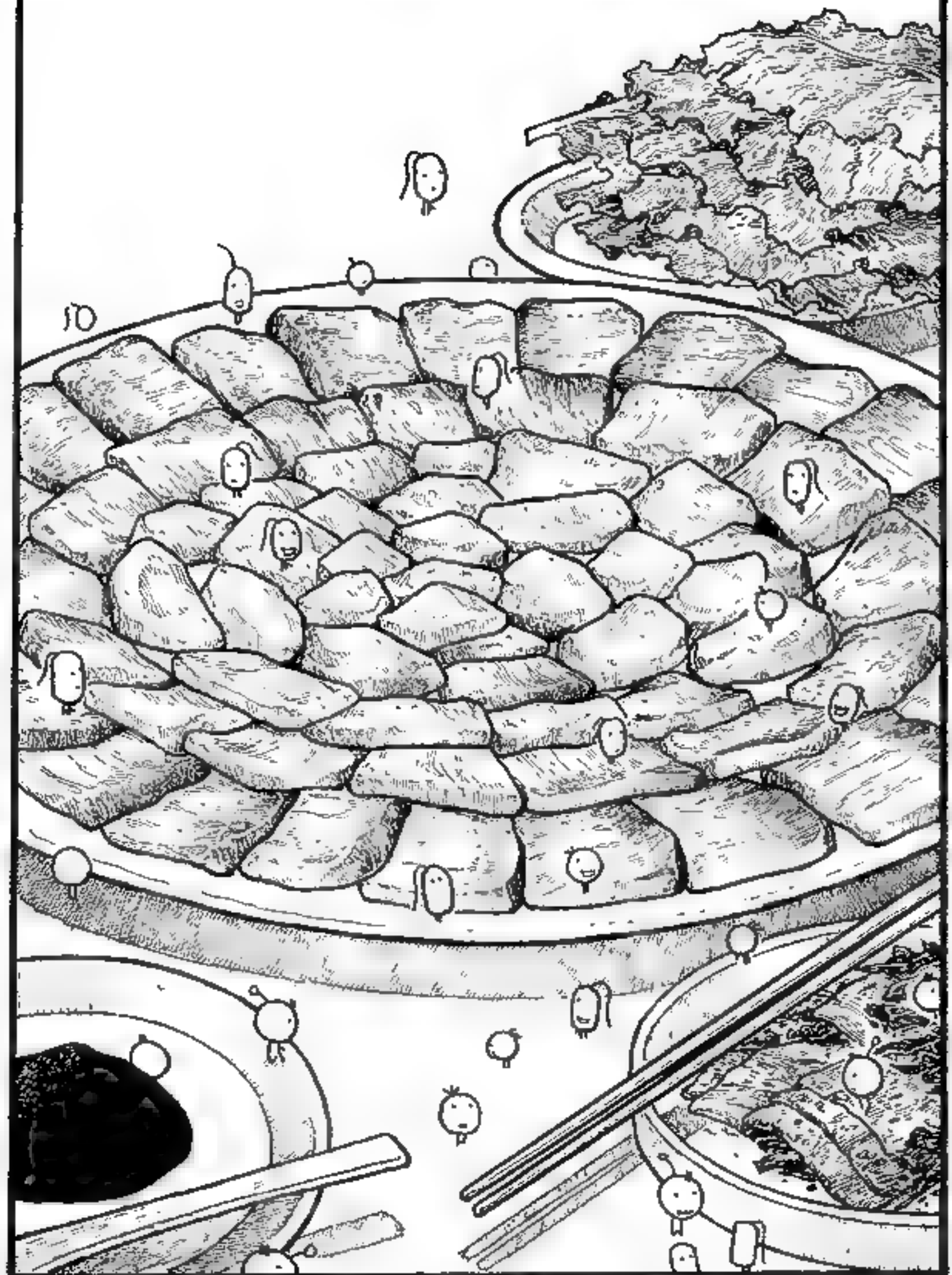
IN COMPARISON,
THE STRENGTH
OF THE SMELL
IS FIVE TIMES
WORSE THAN
KIVIAK,



Kiviak

This is a food where a seal's belly is stuffed with sea birds and allowed to ferment in the ground.





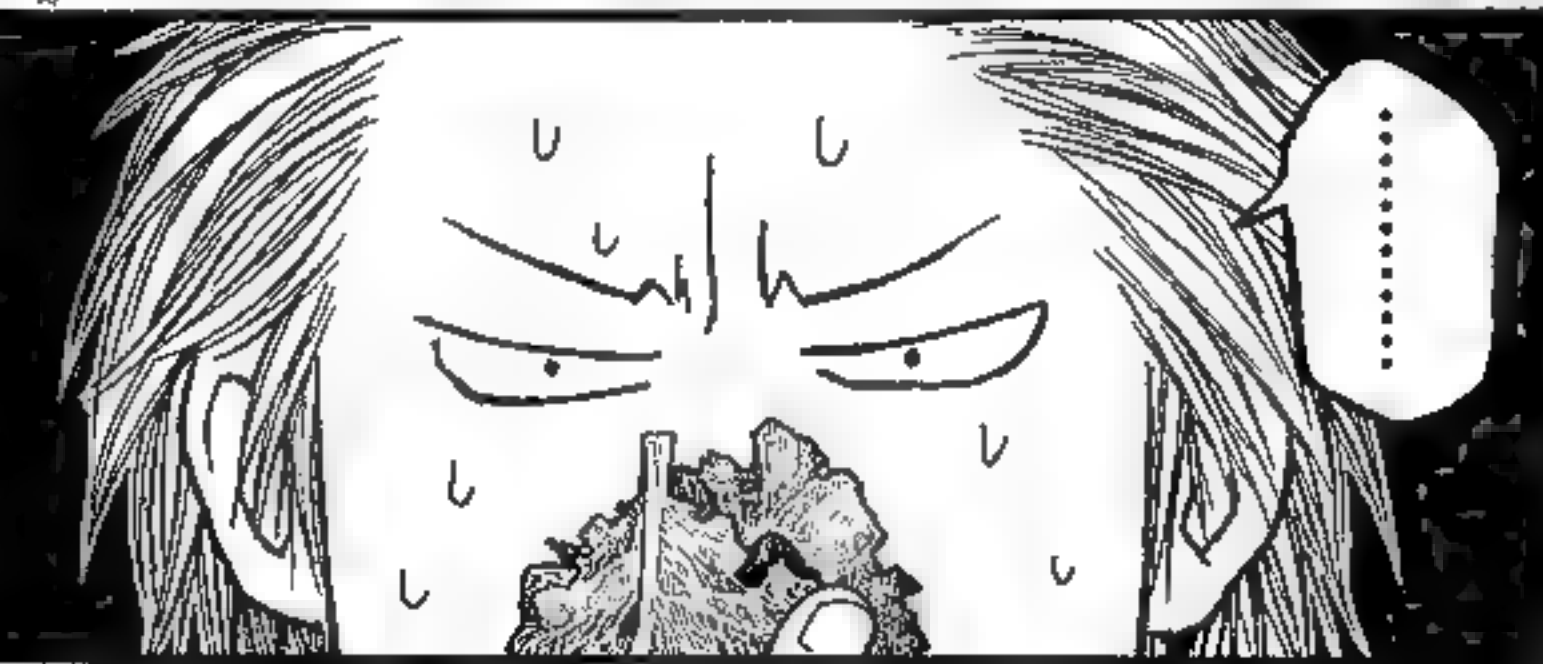
Pediococcus pentosaceus

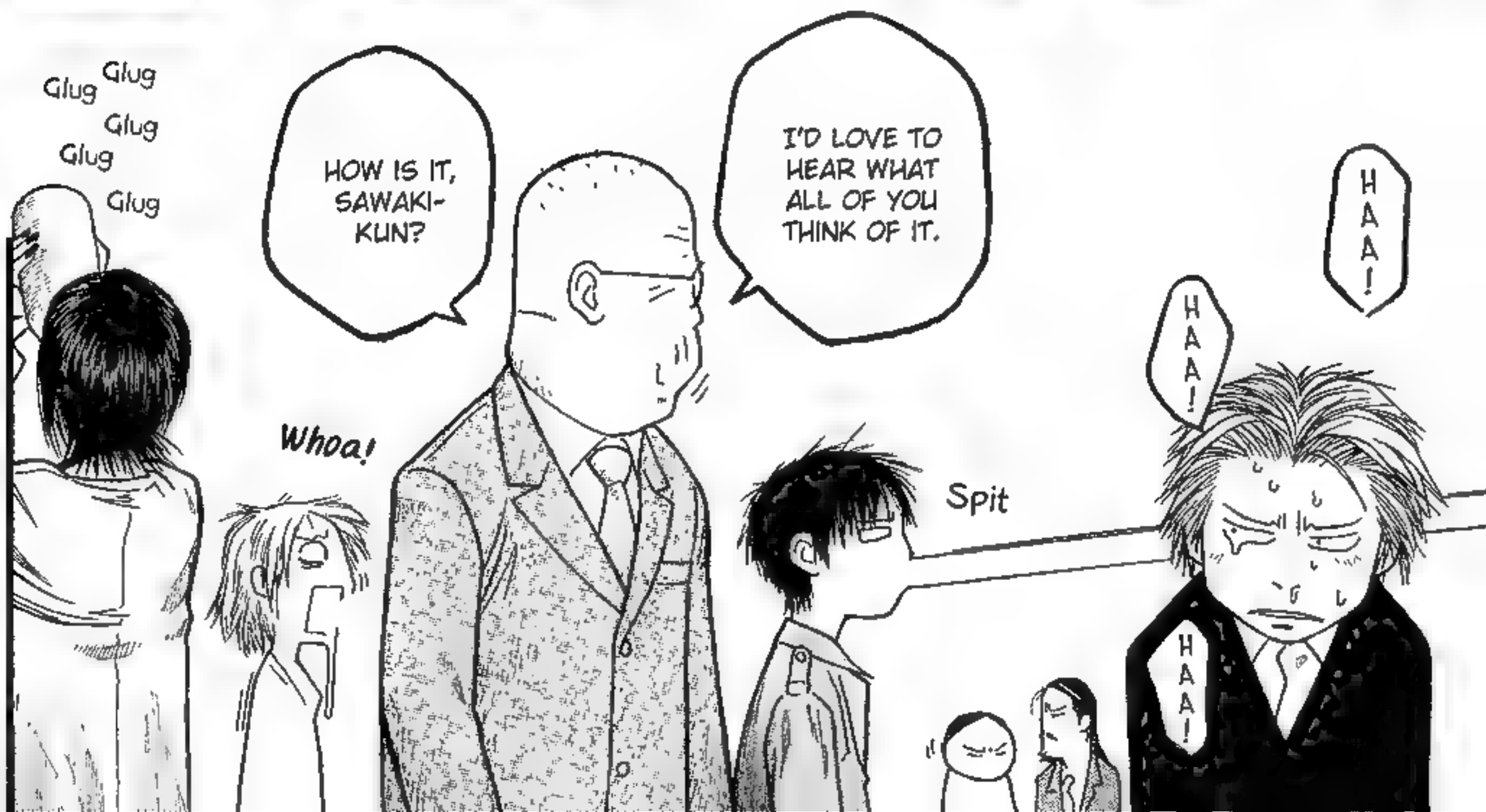
This is the lactic acid bacteria in kimchi. 1 gram of kimchi contains 800 million cells of this bacteria

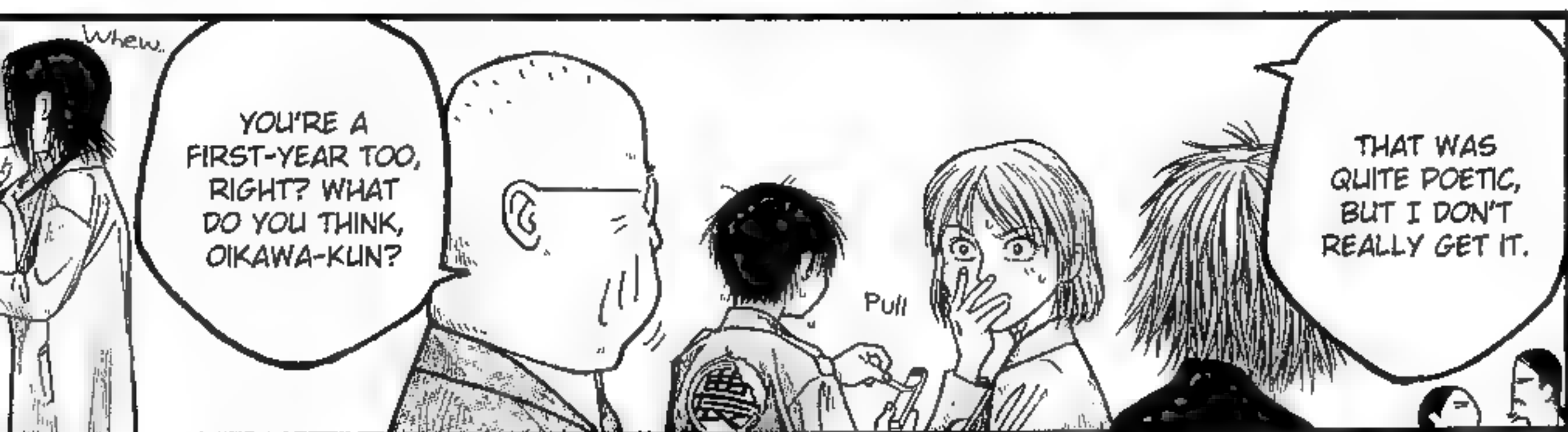


L. plantarum

There are about 1 billion of these guys in 1 gram, too.









Left

MAKING IT
IS VERY
SIMPLE.

ALL THEY DO IS
PUT THE SKATE IN
A POT AND LEAVE
IT AT A CONSTANT
TEMPERATURE FOR
EITHER A FEW
DAYS IN THE
SUMMER OR A
WEEK IN THE
WINTER.

alone

AS I SAID
EARLIER,
HONGEOHOE
FERMENTS FROM
THE AMMONIA
AND UREA IN THE
SKATE'S BODY.

BUT WELL,
ALL OF YOUR
THOUGHTS
ON IT WERE
SPOT ON.

COME TO
THINK OF IT...
WHAT KIND
OF RESEARCH
ARE YOU DOING,
PROFESSOR?

IS IT RELATED
TO WEIRD
FERMENTATION
PROCESSES LIKE
WITH THAT SEAL
YESTERDAY OR
THIS SKATE?

SOUTH JEOLLA
PROVINCE SHOULD
HAVE ACCESS
TO PLENTY OF
SEAFOOD, SO THEY
SHOULDN'T HAVE
TO RELY ON
FERMENTATION.

South
Korea

ISN'T THAT...
CLEARLY ONE OF
THOSE THINGS
THAT WAS MADE
ACCIDENTALLY...?

THAT SAID, EVEN
IN SOUTH KOREA,
HONGEOHOE IS
GENERALLY SOLD
WITHOUT SMELLING
LIKE AMMONIA, SO
IT'S EASY TO EAT.

BUT IT'S
AMAZING HOW
IT'S ACTUALLY
REMAINED A
PART OF THEIR
CULTURE.

Bite

IT STARTED IN 1961
WITH THE IDEA OF
TERRAFORMING
PLANETS, AND THEN
AFTER THE IDEA OF
SPACE COLONIES WAS
PROPOSED, THERE WAS
SOME SUPPORT FOR
IT AS A TOPIC OF
RESEARCH.

DO YOU
KNOW WHAT
TERRAFORMING
IS?

IN OTHER
WORDS, YOU
COULD SAY
THAT THIS
PLANET ISN'T
SUITED TO
FLOURISH FOR
A LONG TIME.

IF WE CAN
IMAGINE AN
IDEAL LAND,
IT'S HUMANITY'S
MISSION TO
CREATE IT.

THERE'S
NOTHING WE'D
BE ABLE TO
DO IF THE
ENVIRONMENT
CHANGED
DRAMATICALLY.

WHEN YOU
CONSIDER THE
REASON FOR THE
EXTINCTION OF
THE DOMINANT
SPECIES ON
EARTH IN THE
PAST,

BACTERIA THAT
GROW IN HARSH
ENVIRONMENTS HAVE
BEEN AROUND SINCE
EARTH WAS STILL
PRIMEVAL, AND
THOSE MICROBES THAT
STILL EXIST TODAY
DEMONSTRATE VARIOUS
POSSIBILITIES.

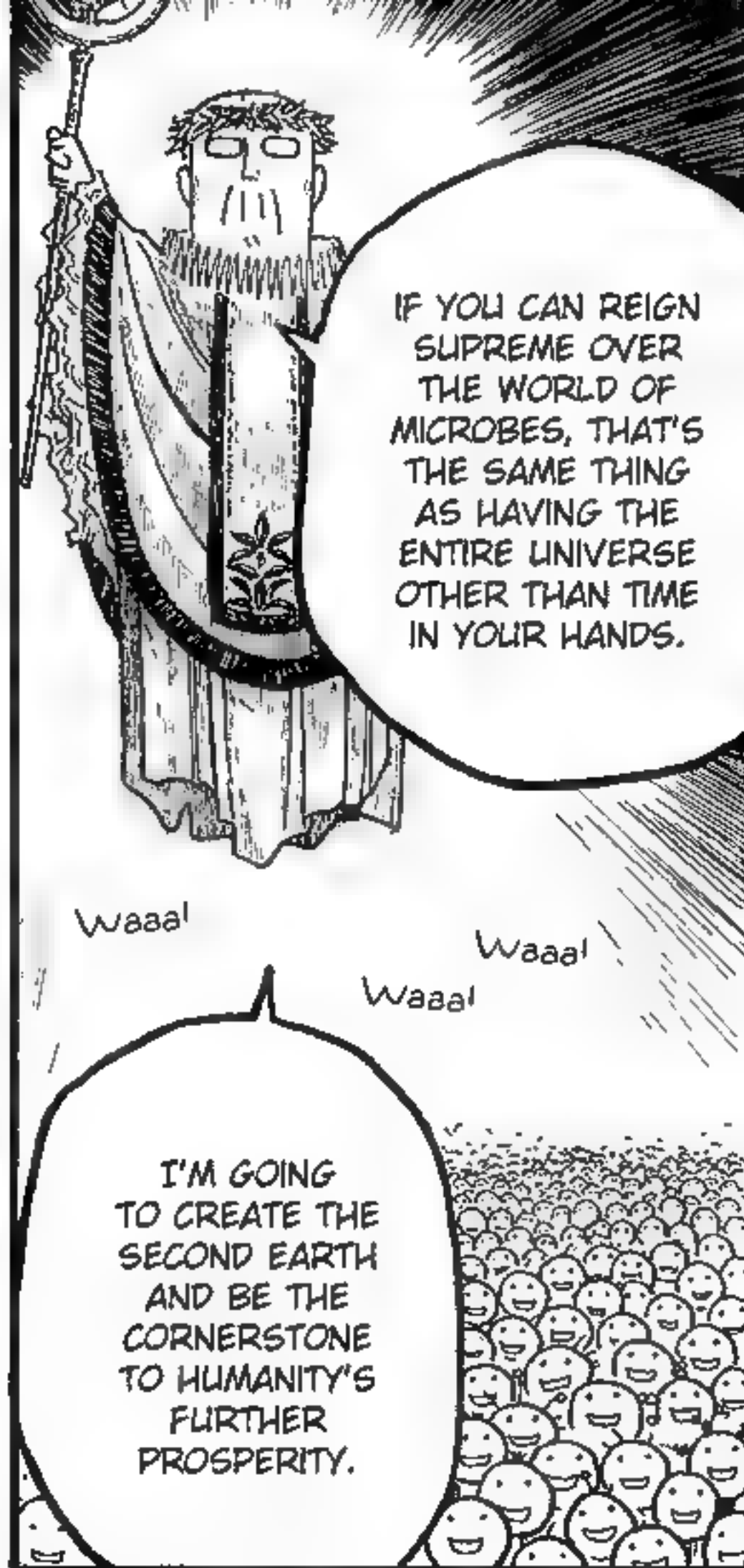
ON TOP OF
AGRICULTURE
BEING PART OF
HUMAN HISTORY,
IT'S ALSO A
SCIENCE THAT
TELLS YOU
EVERYTHING
ABOUT THE
EARTH.

AND SO, I WANT
TO APPROACH
TERRAFORMING
FROM THE
STANDPOINT OF
AGRICULTURAL
SCIENCE.



IF YOU'RE EVEN ONE SECOND LATE IN GETTING YOUR THESIS OUT BEFORE SOMEONE ELSE DOES, DECADES WORTH OF RESEARCH WILL ALL COME TO NOTHING.

...THE WORLD'S RESEARCH ADVANCES RAPIDLY.

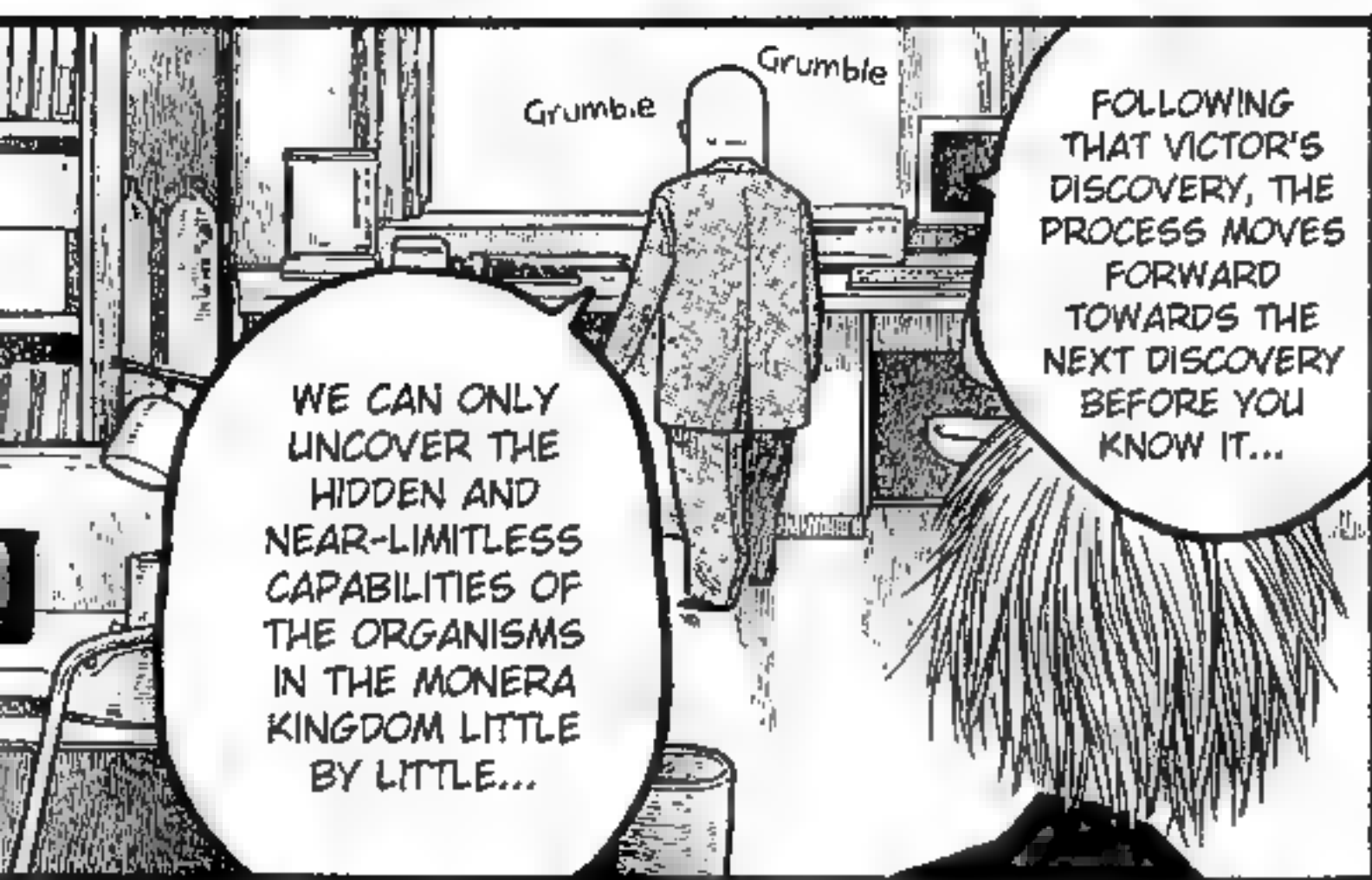


IF YOU CAN REIGN SUPREME OVER THE WORLD OF MICROBES, THAT'S THE SAME THING AS HAVING THE ENTIRE UNIVERSE OTHER THAN TIME IN YOUR HANDS.

Waaa!

Waaa!
Waaa!

I'M GOING TO CREATE THE SECOND EARTH AND BE THE CORNERSTONE TO HUMANITY'S FURTHER PROSPERITY.



WE CAN ONLY UNCOVER THE HIDDEN AND NEAR-LIMITLESS CAPABILITIES OF THE ORGANISMS IN THE MONERA KINGDOM LITTLE BY LITTLE...

FOLLOWING THAT VICTOR'S DISCOVERY, THE PROCESS MOVES FORWARD TOWARDS THE NEXT DISCOVERY BEFORE YOU KNOW IT...



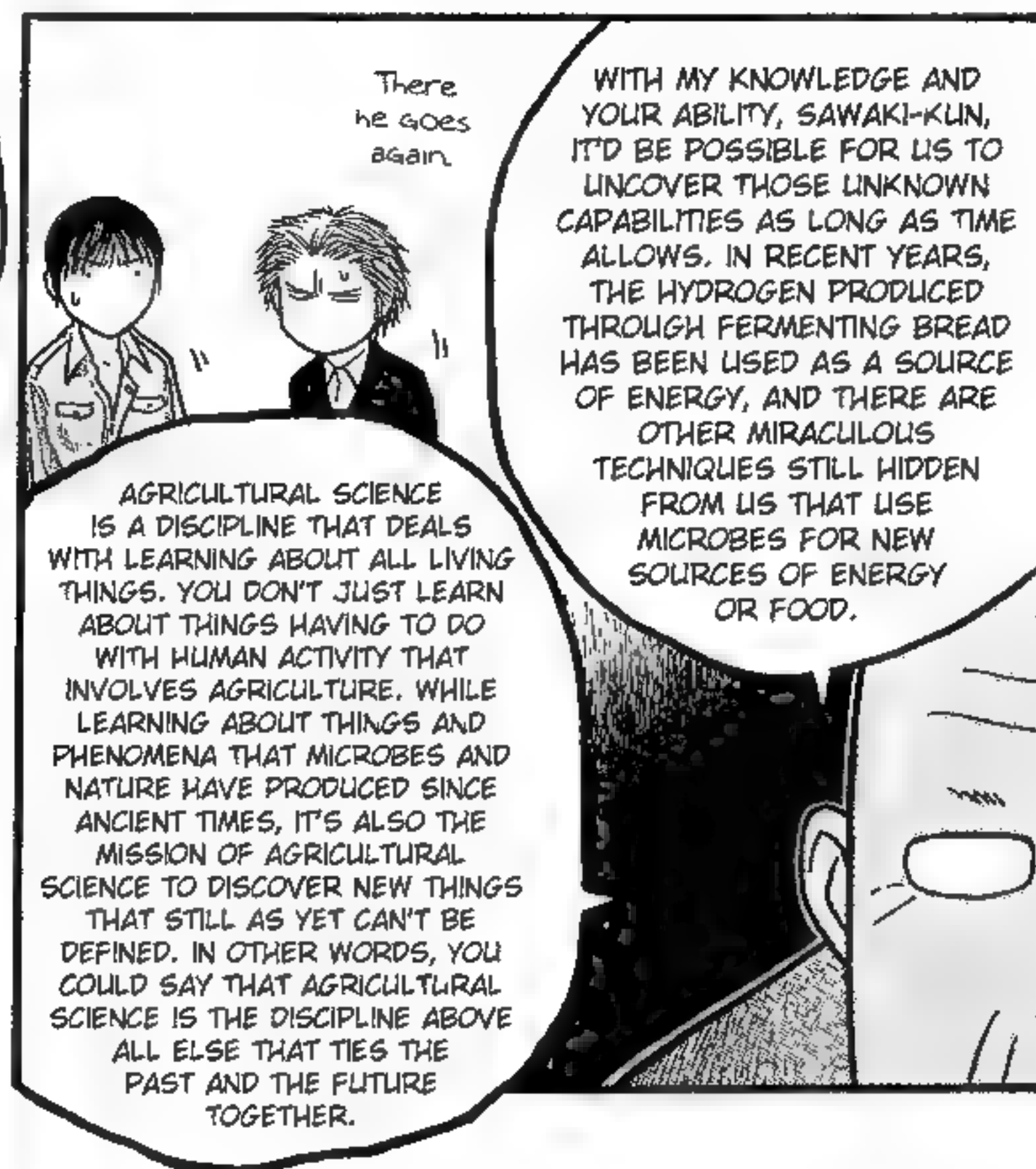
Monera

This is the name of the biological kingdom which at one time contained all bacteria, including cyanobacteria.



IN SHORT, EVERYTHING IS A PROCESS...

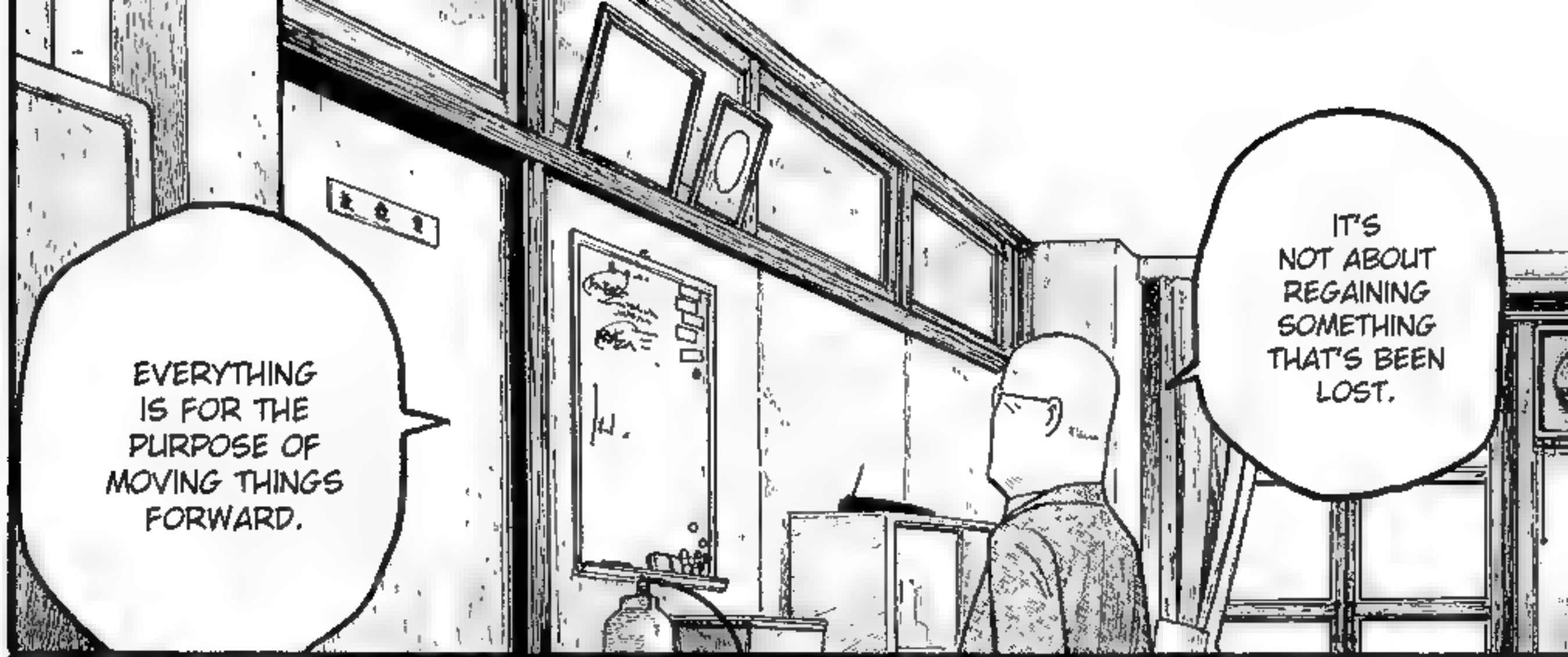
AND EVEN NOW, IT'S ALL A CORNERSTONE FOR THE FUTURE.



There he goes again.

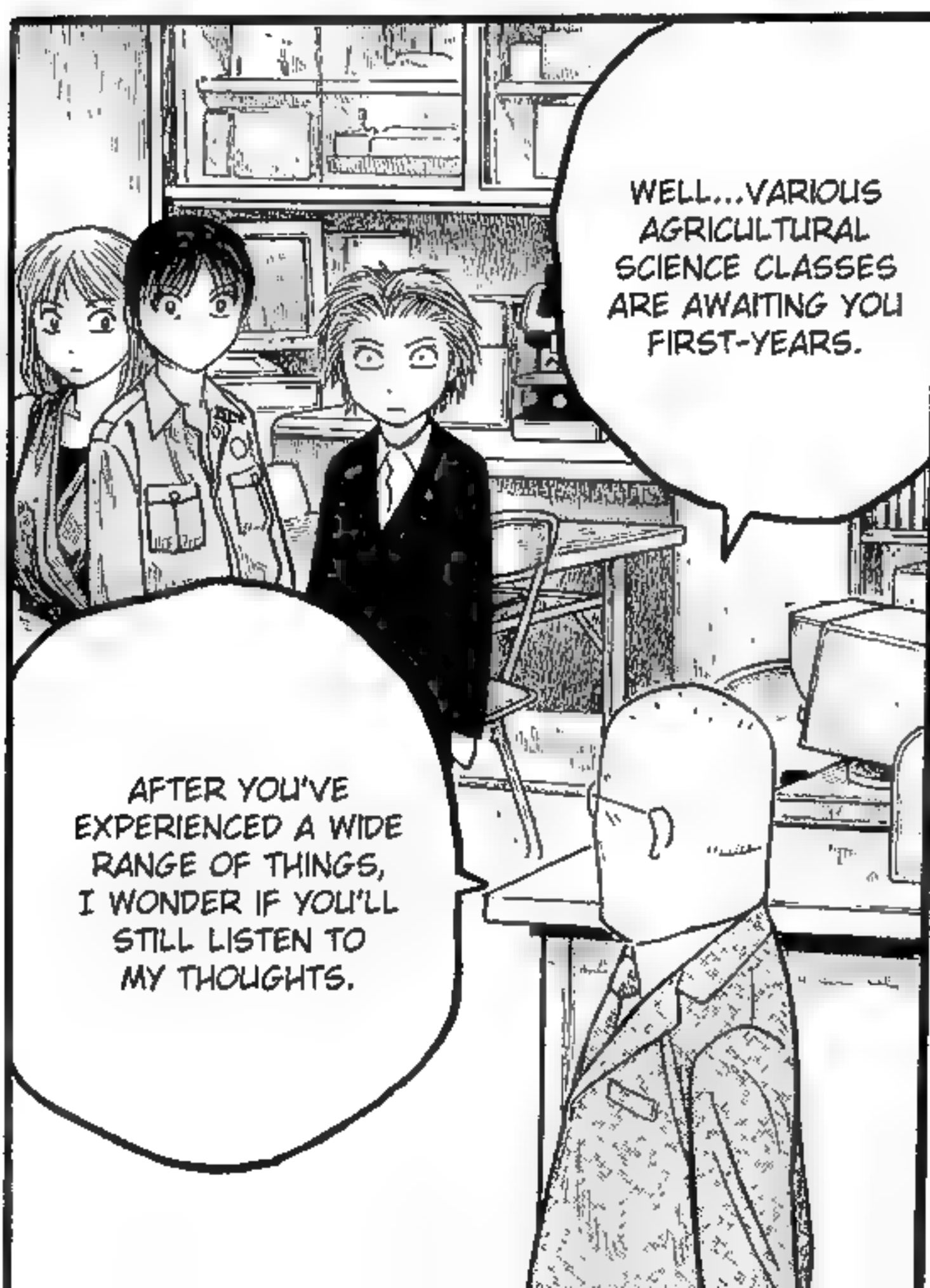
AGRICULTURAL SCIENCE IS A DISCIPLINE THAT DEALS WITH LEARNING ABOUT ALL LIVING THINGS. YOU DON'T JUST LEARN ABOUT THINGS HAVING TO DO WITH HUMAN ACTIVITY THAT INVOLVES AGRICULTURE. WHILE LEARNING ABOUT THINGS AND PHENOMENA THAT MICROBES AND NATURE HAVE PRODUCED SINCE ANCIENT TIMES, IT'S ALSO THE MISSION OF AGRICULTURAL SCIENCE TO DISCOVER NEW THINGS THAT STILL AS YET CAN'T BE DEFINED. IN OTHER WORDS, YOU COULD SAY THAT AGRICULTURAL SCIENCE IS THE DISCIPLINE ABOVE ALL ELSE THAT TIES THE PAST AND THE FUTURE TOGETHER.

WITH MY KNOWLEDGE AND YOUR ABILITY, SAWAKI-KUN, IT'D BE POSSIBLE FOR US TO UNCOVER THOSE UNKNOWN CAPABILITIES AS LONG AS TIME ALLOWS. IN RECENT YEARS, THE HYDROGEN PRODUCED THROUGH FERMENTING BREAD HAS BEEN USED AS A SOURCE OF ENERGY, AND THERE ARE OTHER MIRACULOUS TECHNIQUES STILL HIDDEN FROM US THAT USE MICROBES FOR NEW SOURCES OF ENERGY OR FOOD.



EVERYTHING
IS FOR THE
PURPOSE OF
MOVING THINGS
FORWARD.

IT'S
NOT ABOUT
REGAINING
SOMETHING
THAT'S BEEN
LOST.



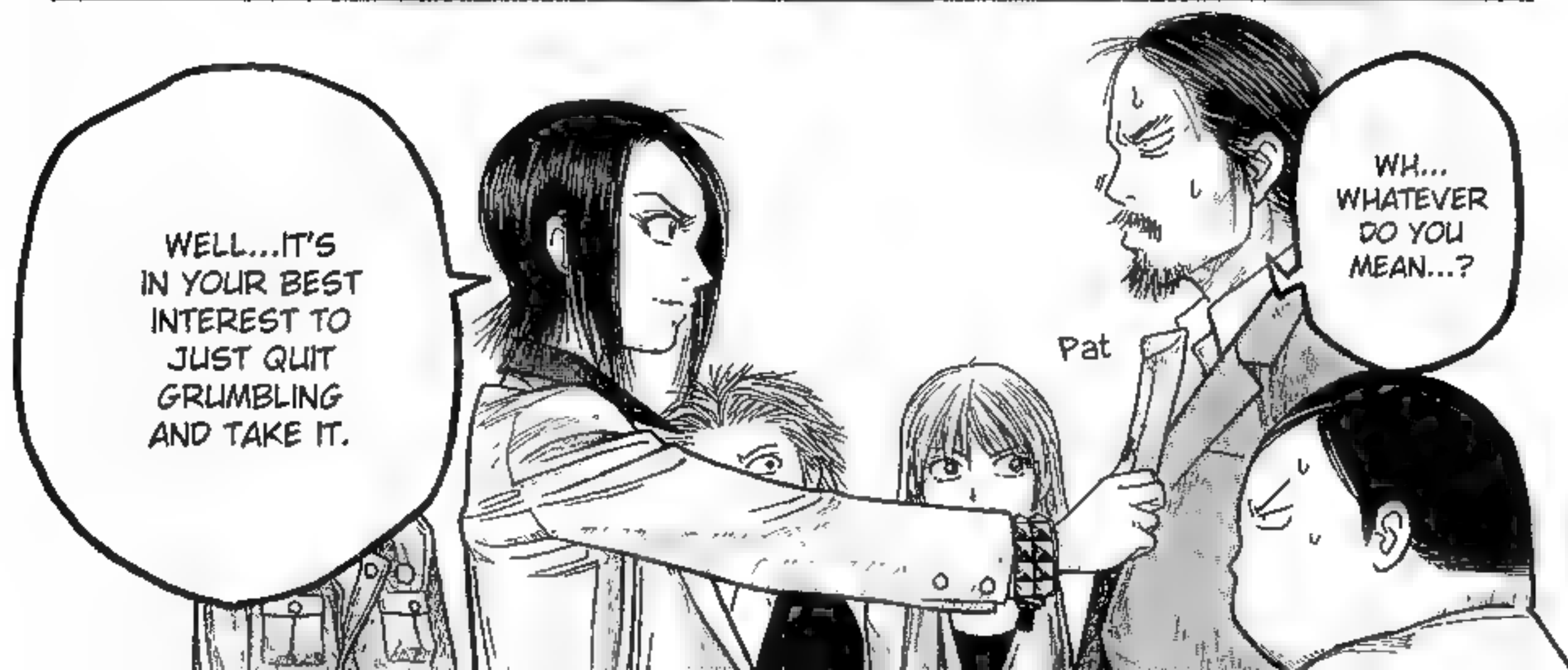
WELL...VARIOUS
AGRICULTURAL
SCIENCE CLASSES
ARE AWAITING YOU
FIRST-YEARS.

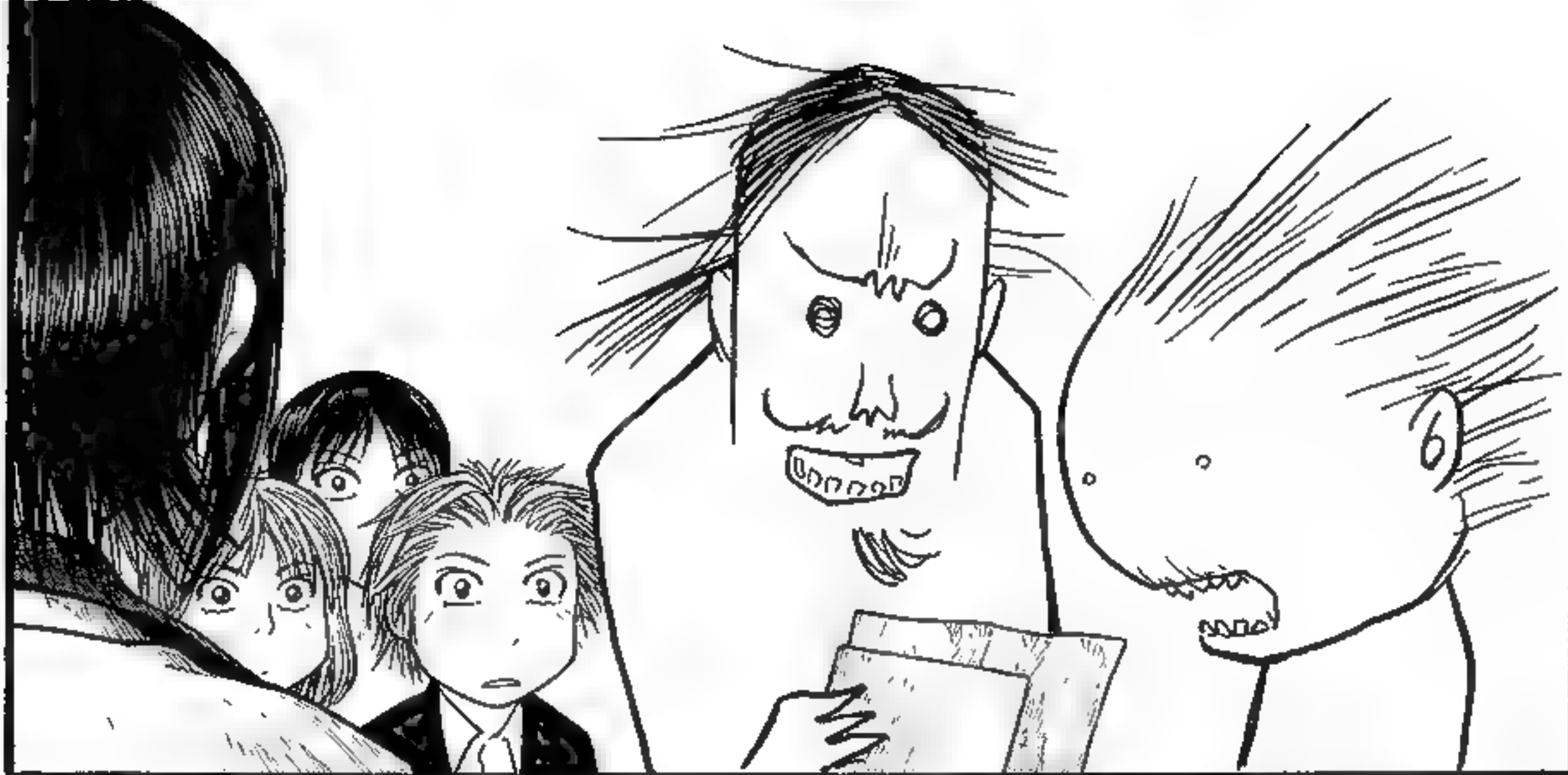
AFTER YOU'VE
EXPERIENCED A WIDE
RANGE OF THINGS,
I WONDER IF YOU'LL
STILL LISTEN TO
MY THOUGHTS.



WHAT IS
HE TALKING
ABOUT?

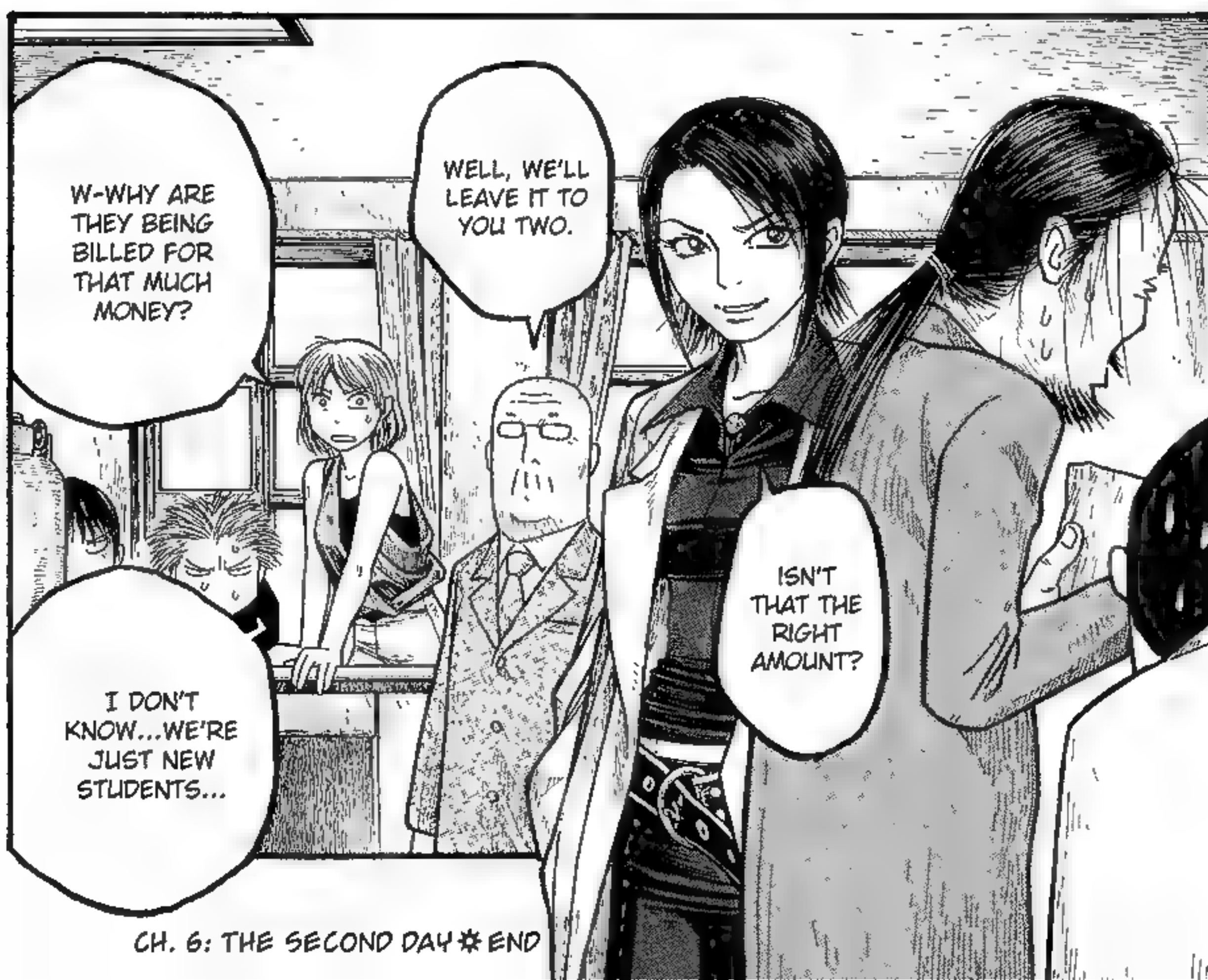
I DON'T
KNOW...





0	Farm tools	500
	Total	10,285,000 (w/ tax)

...10...



Classes are going to start soon.

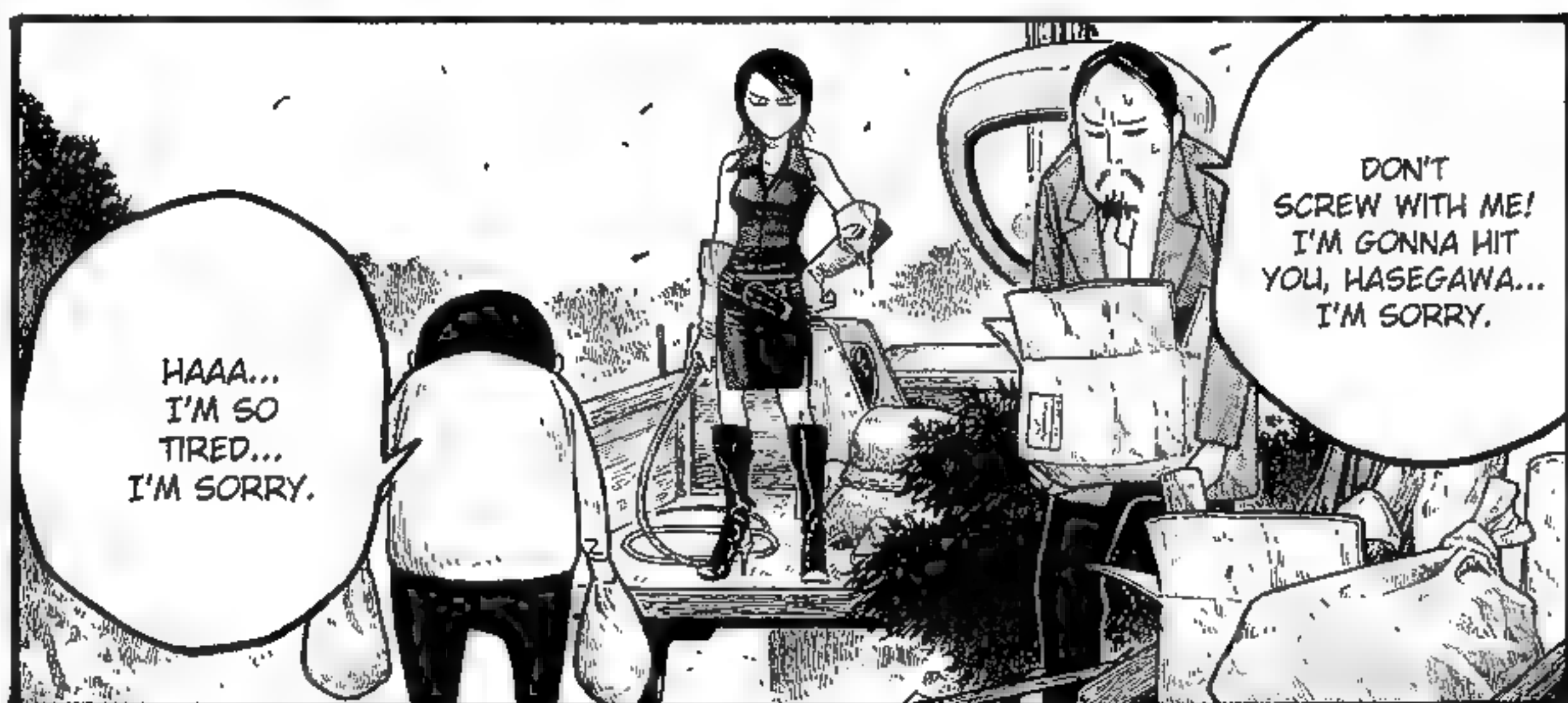
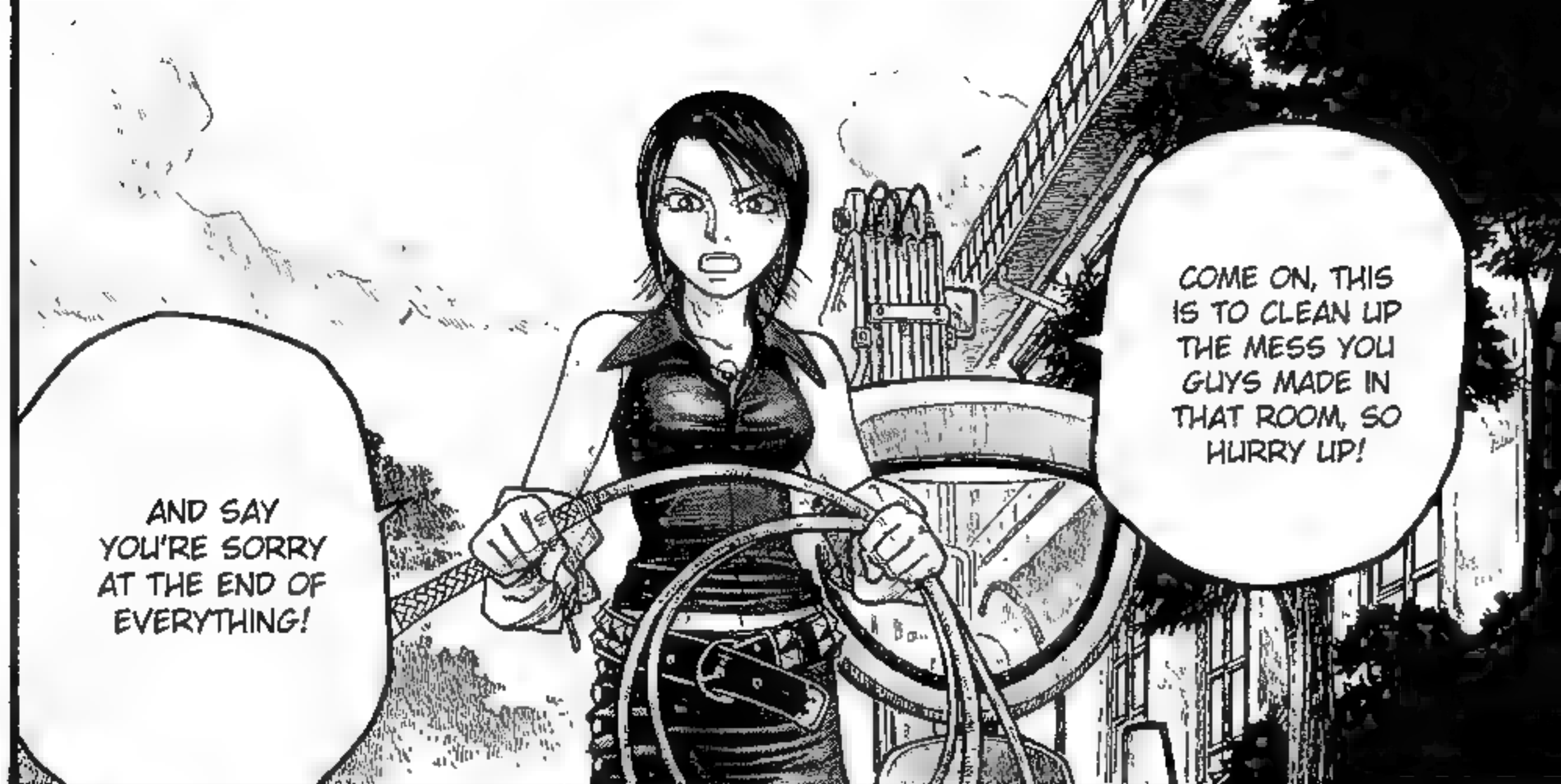


Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com

Although it's chapter 7, it's still the second day in the story.



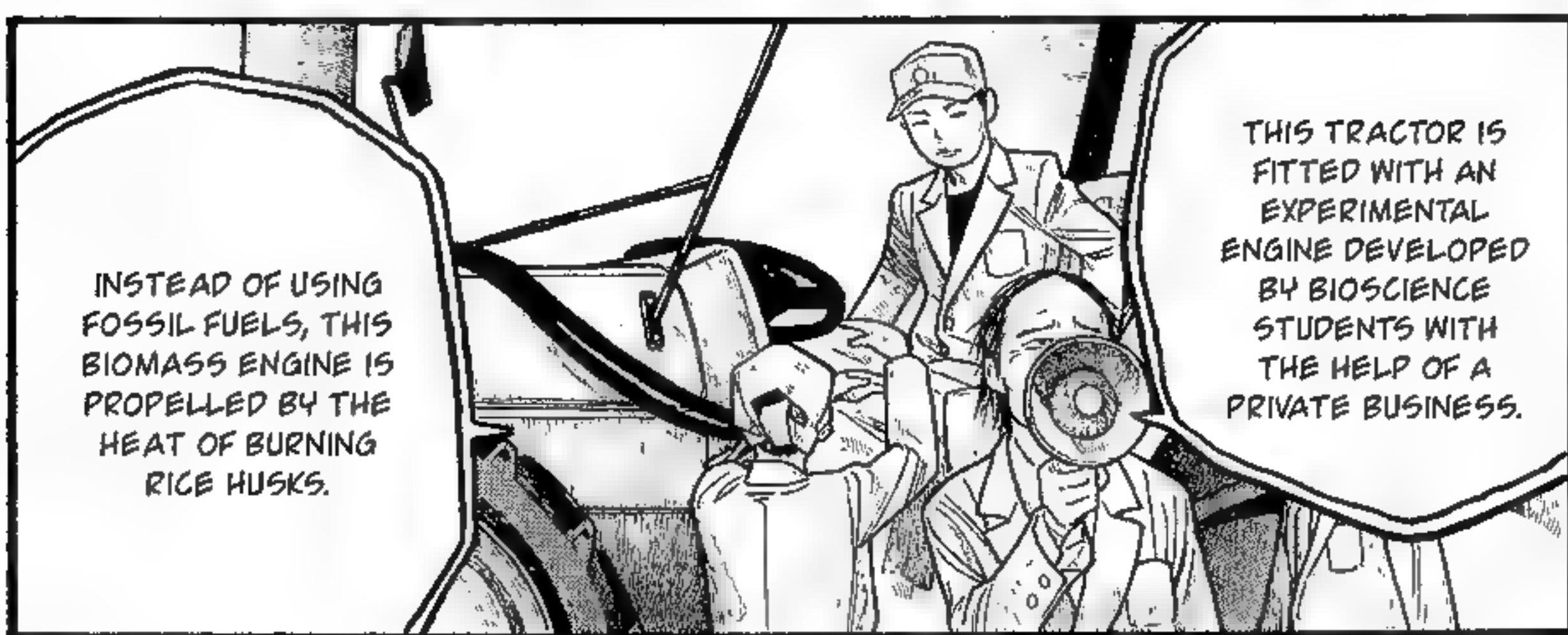
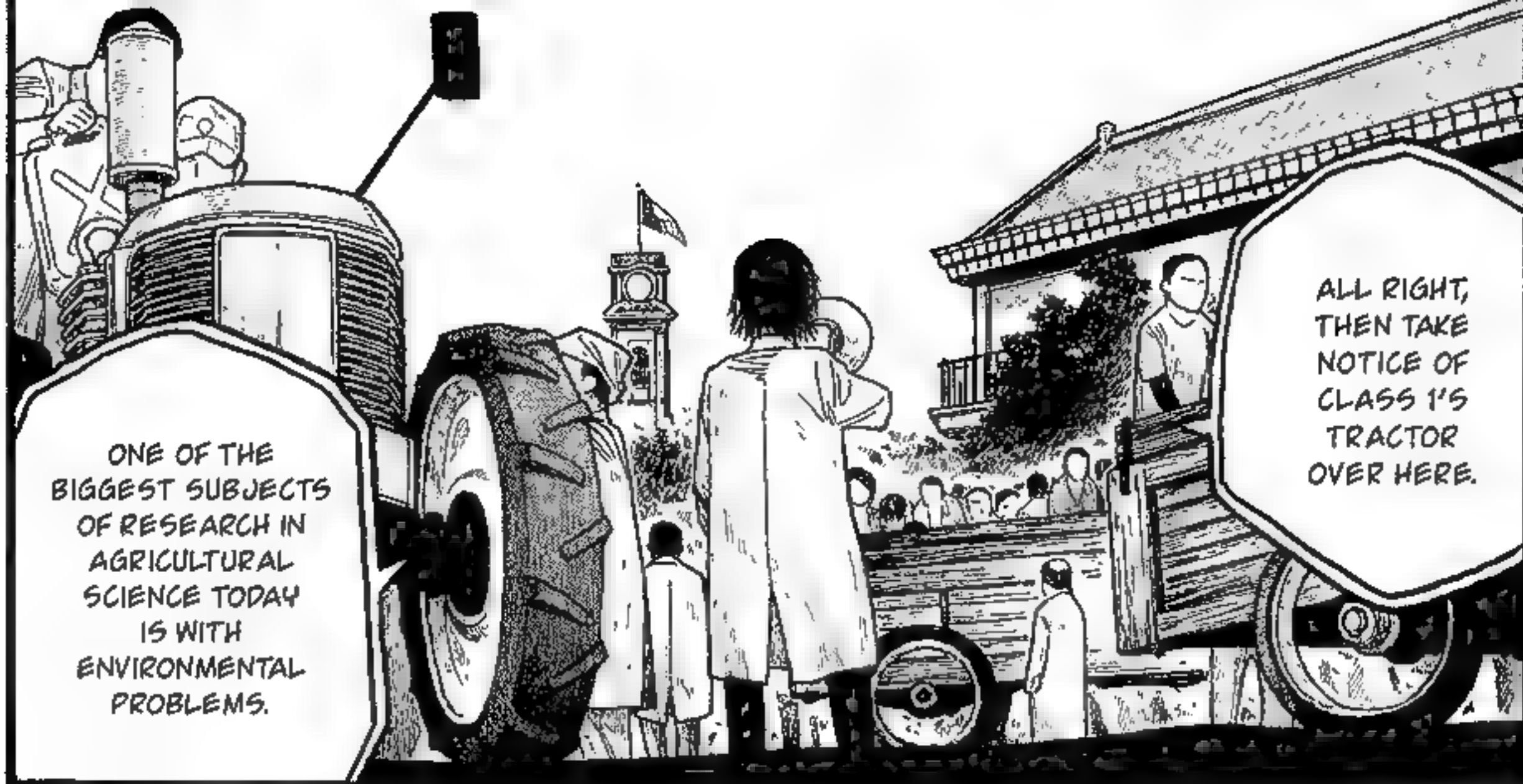
農 is a decoration.

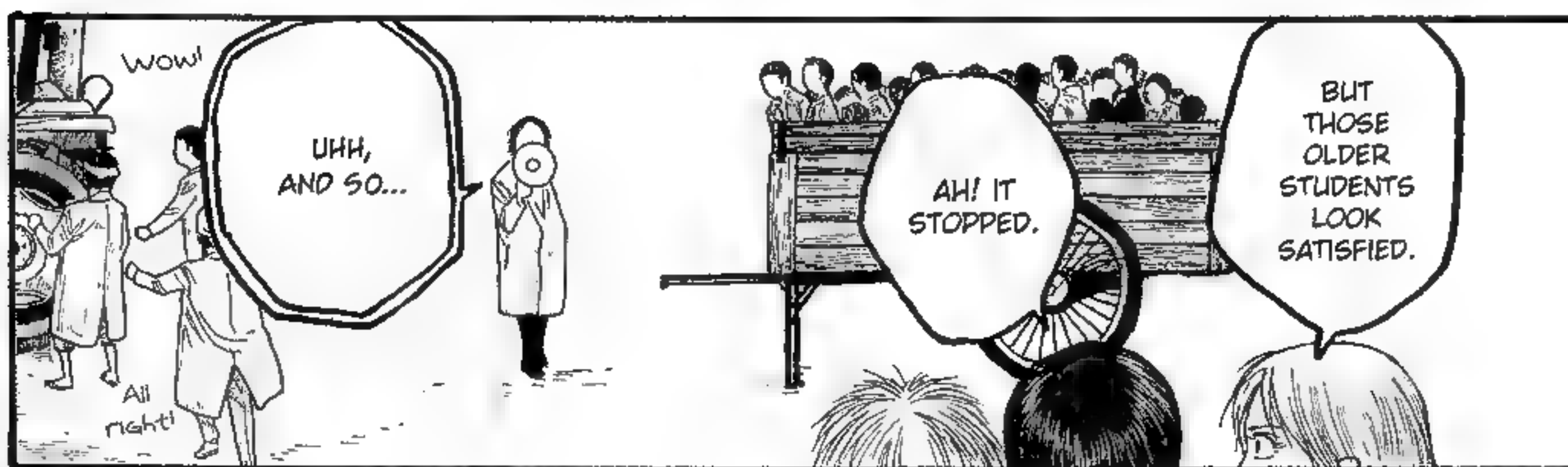
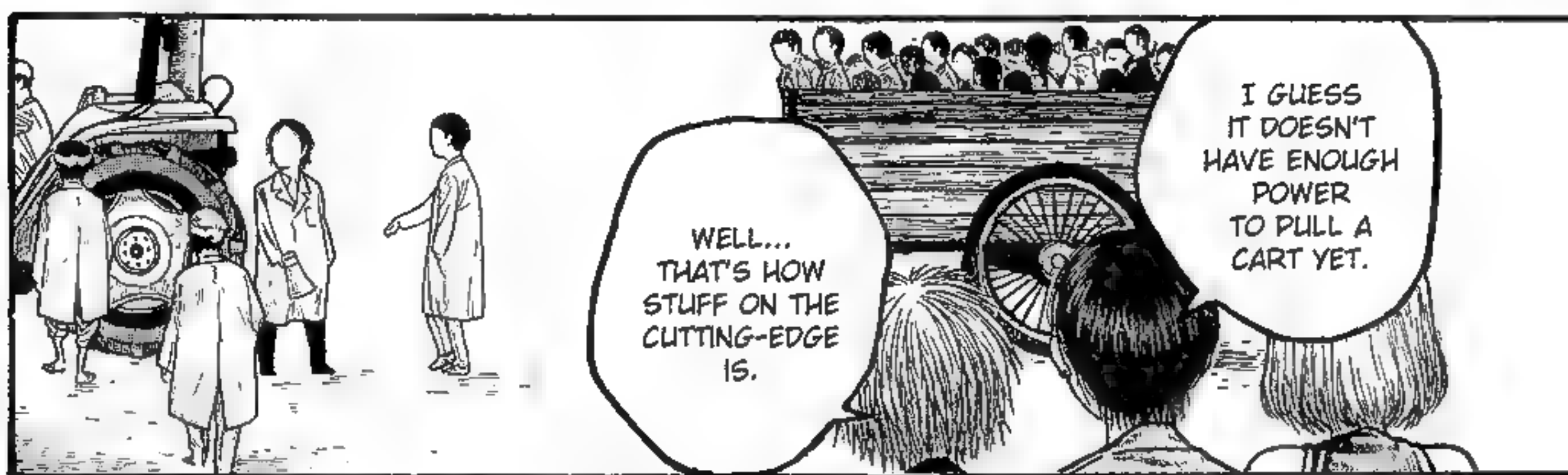
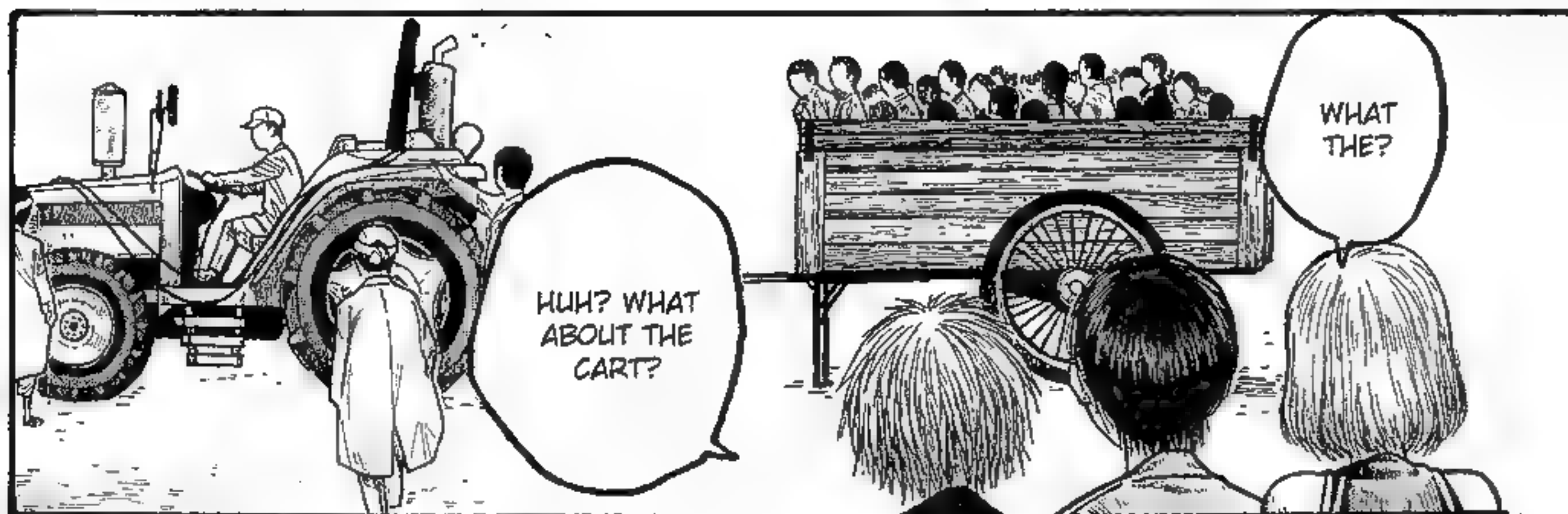
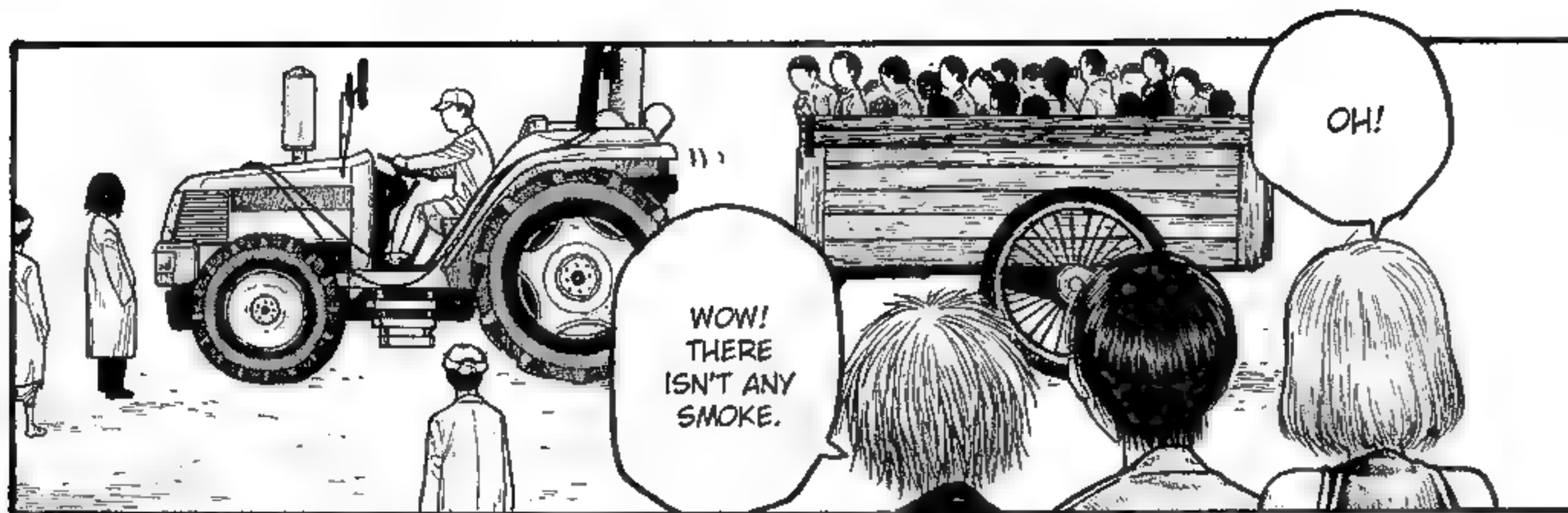
イタズカ

IS
EVERYONE IN
EACH CLASS
IN A CART?

AS
FIRST-YEARS,
WE'RE
TAKING TIME
AWAY FROM
PROFESSOR
ITSUKI FOR
NOW TO TAKE
PART IN
ORIENTATION.

CH. 7:
ORIENTATION







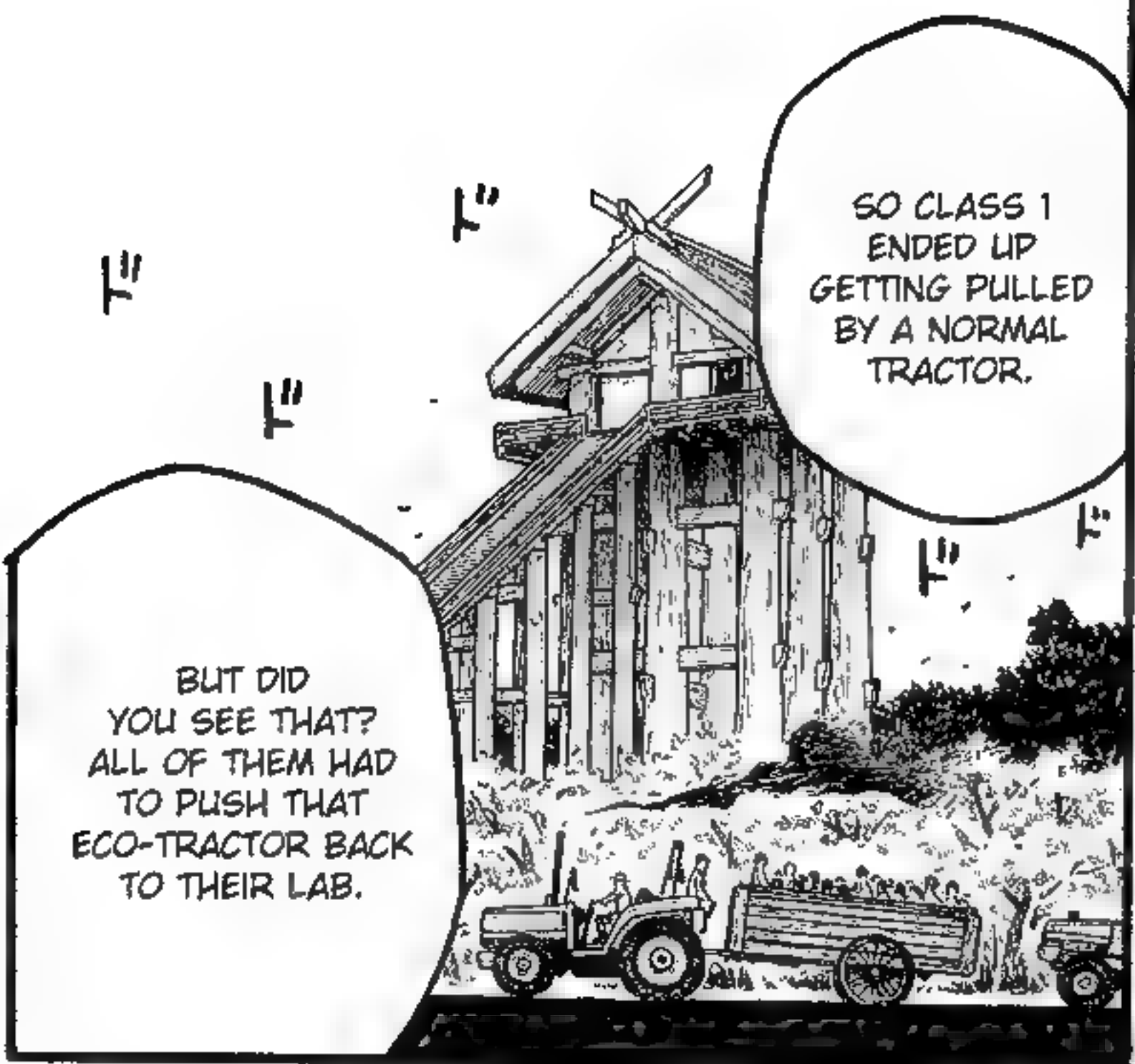
Tadayasu Sawaki
 He's the main character
 For some reason, he can see microbes.
 He'll play a big part this time.



Kei Yuuki
 He's been Sawaki's friend since they were kids and his parents run a sake brewery.
 He's being influenced by Hasegawa, a graduate student.

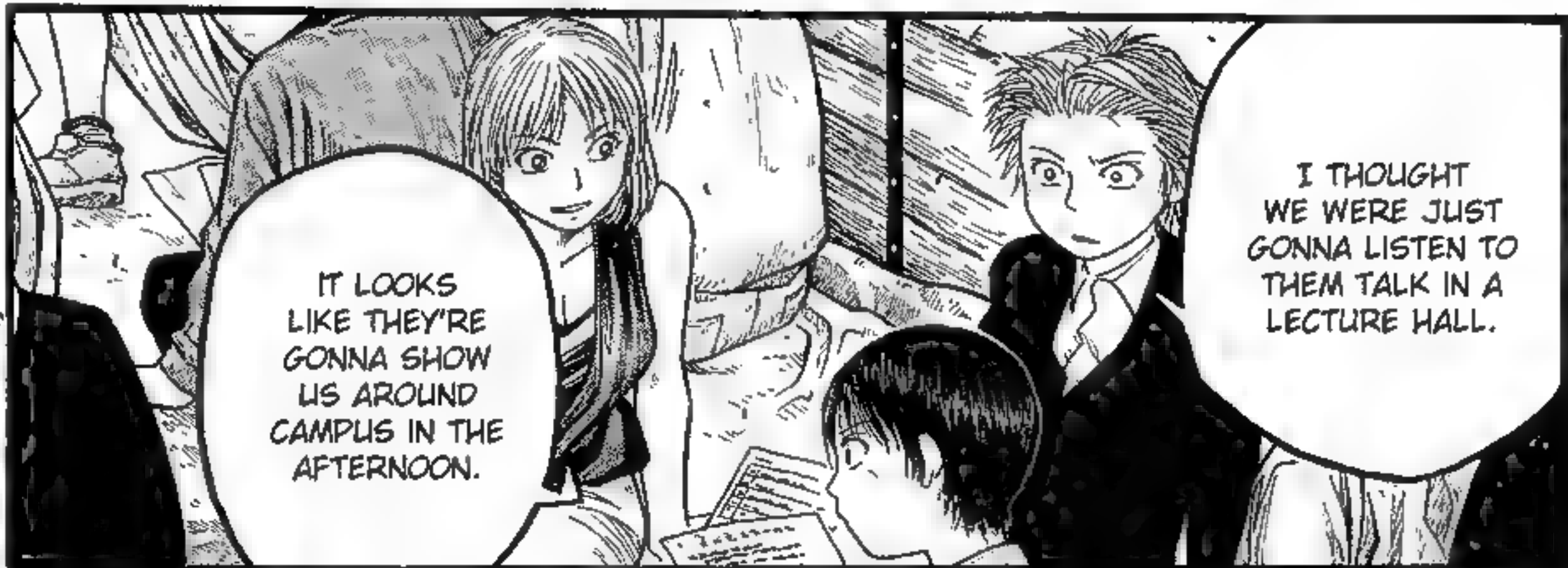
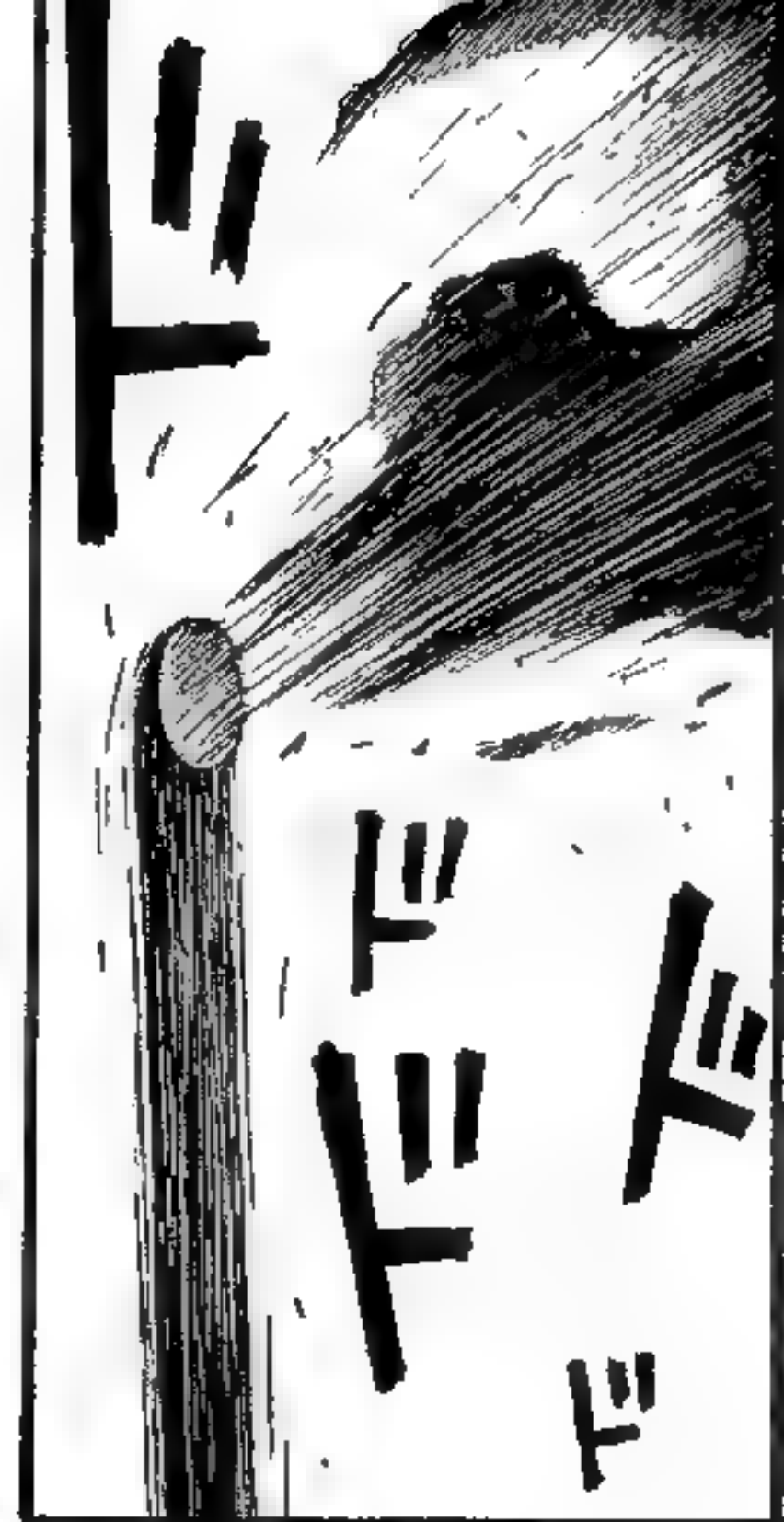


Hazuki Oikawa
 Like Sawaki and Yuuki, she's a first-year at the agricultural university. Professor Itsuk hit on her in the last chapter



BUT DID YOU SEE THAT? ALL OF THEM HAD TO PUSH THAT ECO-TRACTOR BACK TO THEIR LAB.

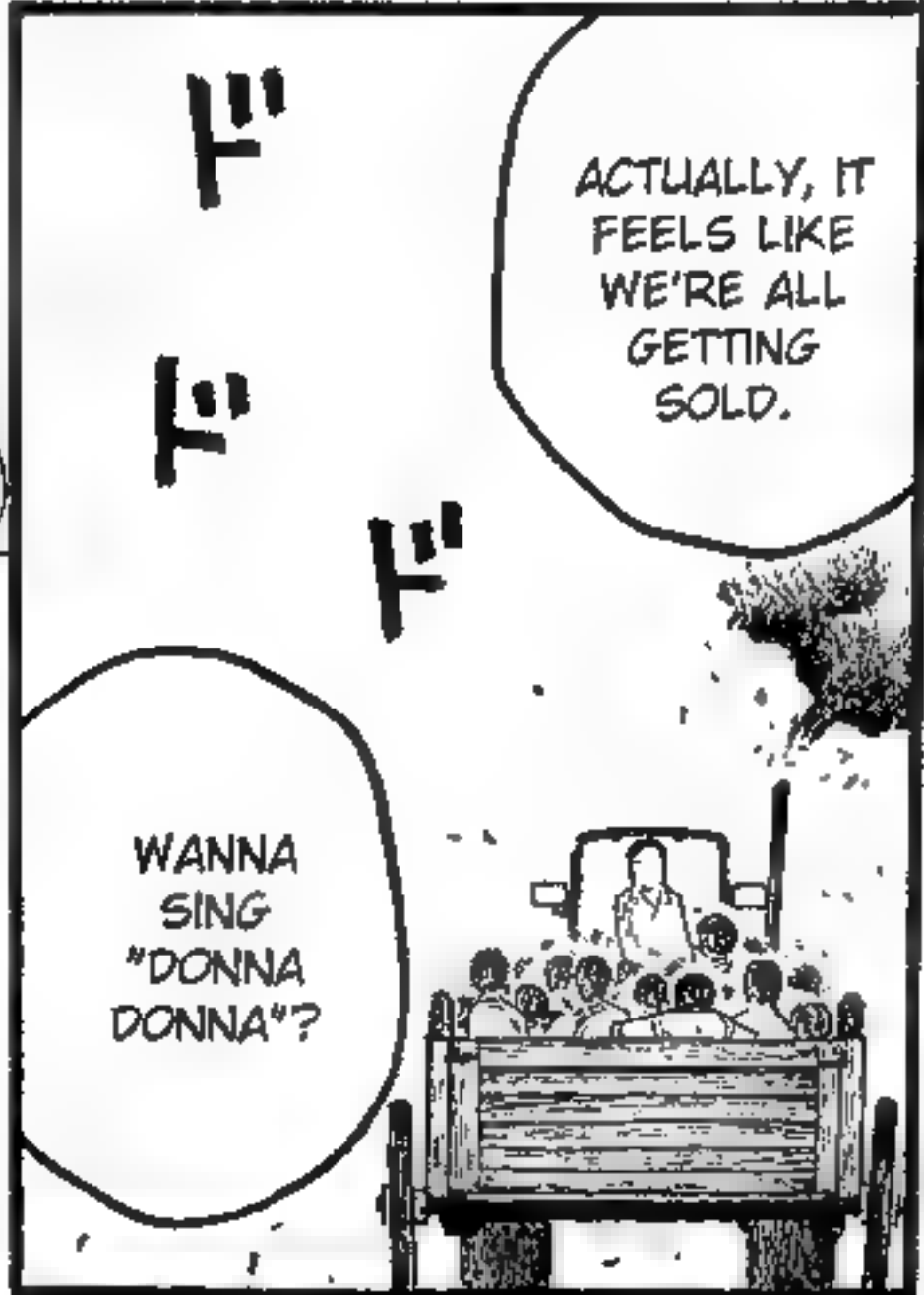
SO CLASS 1 ENDED UP GETTING PULLED BY A NORMAL TRACTOR.



IT LOOKS LIKE THEY'RE GONNA SHOW US AROUND CAMPUS IN THE AFTERNOON.

I THOUGHT WE WERE JUST GONNA LISTEN TO THEM TALK IN A LECTURE HALL.

TL note: "Donna Donna" is a song about a calf being led to slaughter.



WANNA SING "DONNA DONNA"?

ACTUALLY, IT FEELS LIKE WE'RE ALL GETTING SOLD.



IT KINDA FEELS LIKE WE'VE FINALLY STARTED OUR COLLEGE LIVES.

AND LUNCH IS GONNA BE A BUFFET MADE BY THE OLDER STUDENTS.



THESE
ARE HEMP
FIELDS.

ALL RIGHT,
LOOK OVER
TO YOUR
RIGHT.



I DON'T KNOW,
BUT THEY
PROBABLY
HAVE A LICENSE
FOR IT.

IS IT OKAY
FOR THEM TO
BE GROWING
THIS?



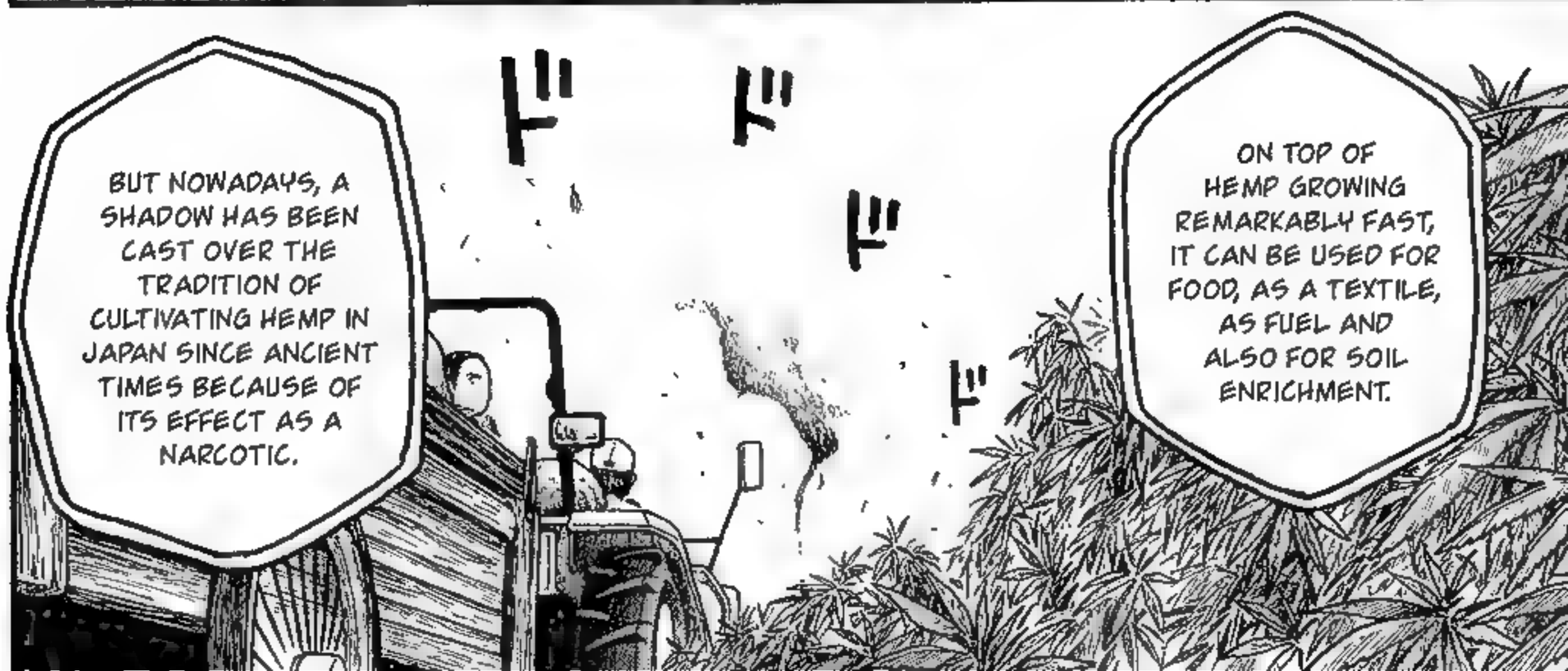
IN THE
1980s, IT GAINED
PROMINENCE IN
PLACES SUCH AS
AUSTRALIA AND
EUROPE FOR ITS
USEFULNESS,



RESEARCH IS
BEING DONE TO
USE HEMP AS AN
ALTERNATIVE
ENERGY SOURCE
IN PLACE OF
GAS.

AS A DIFFERENT
APPROACH
COMPARED TO
THAT TRACTOR
EARLIER,

BUT IT'S A
PLANT THAT'S
BEEN FAMILIAR IN
JAPAN FOR OVER
10,000 YEARS
SINCE THE
JOMON PERIOD.



BUT NOWADAYS, A
SHADOW HAS BEEN
CAST OVER THE
TRADITION OF
CULTIVATING HEMP IN
JAPAN SINCE ANCIENT
TIMES BECAUSE OF
ITS EFFECT AS A
NARCOTIC.

ON TOP OF
HEMP GROWING
REMARKABLY FAST,
IT CAN BE USED FOR
FOOD, AS A TEXTILE,
AS FUEL AND
ALSO FOR SOIL
ENRICHMENT.



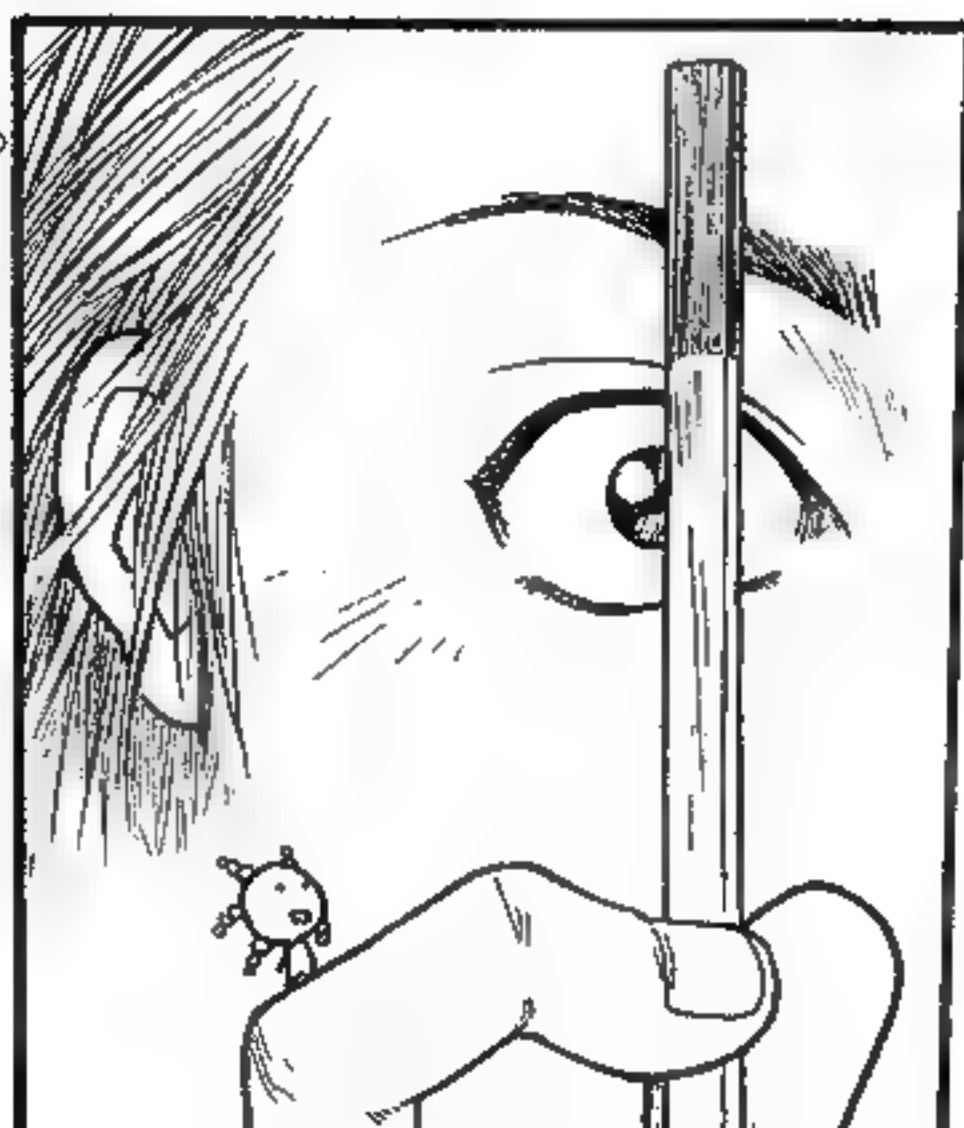
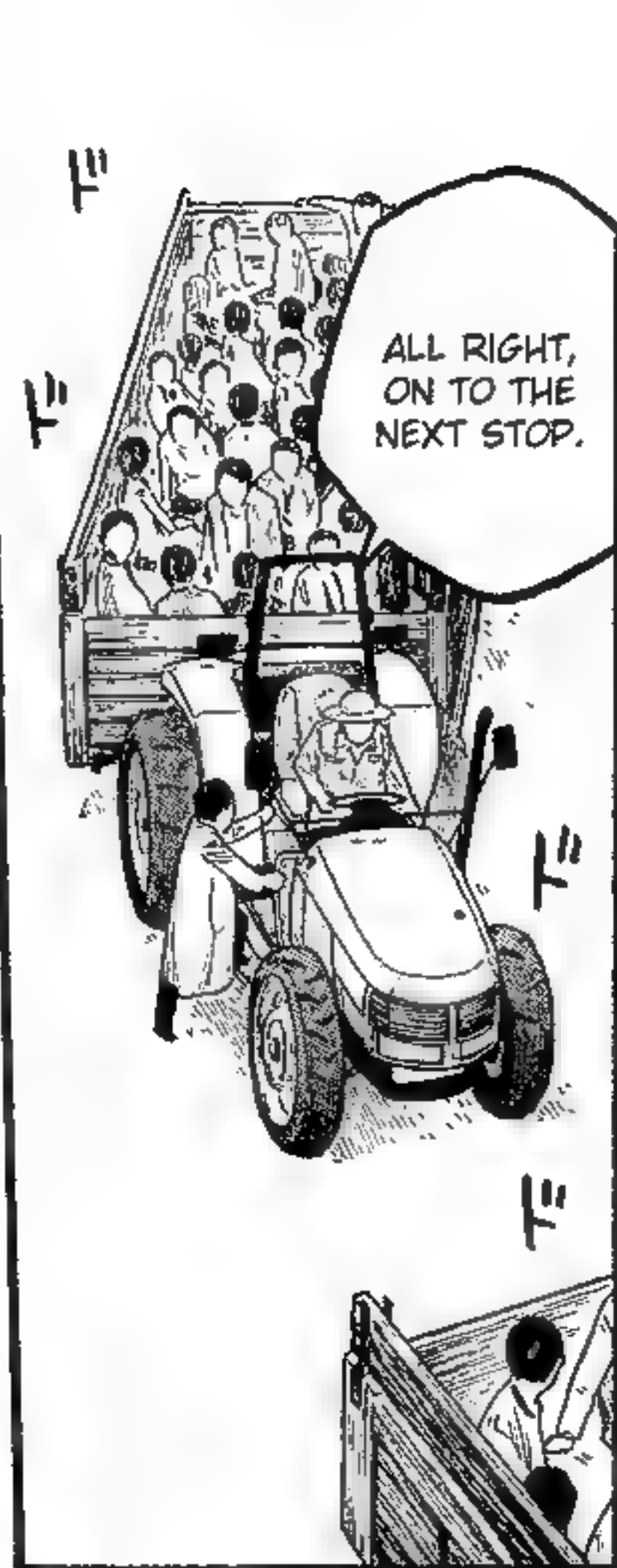
Keizou Itsuki
He's a professor at a certain agricultural university. He wants to use Sawaki's special ability to do something big.

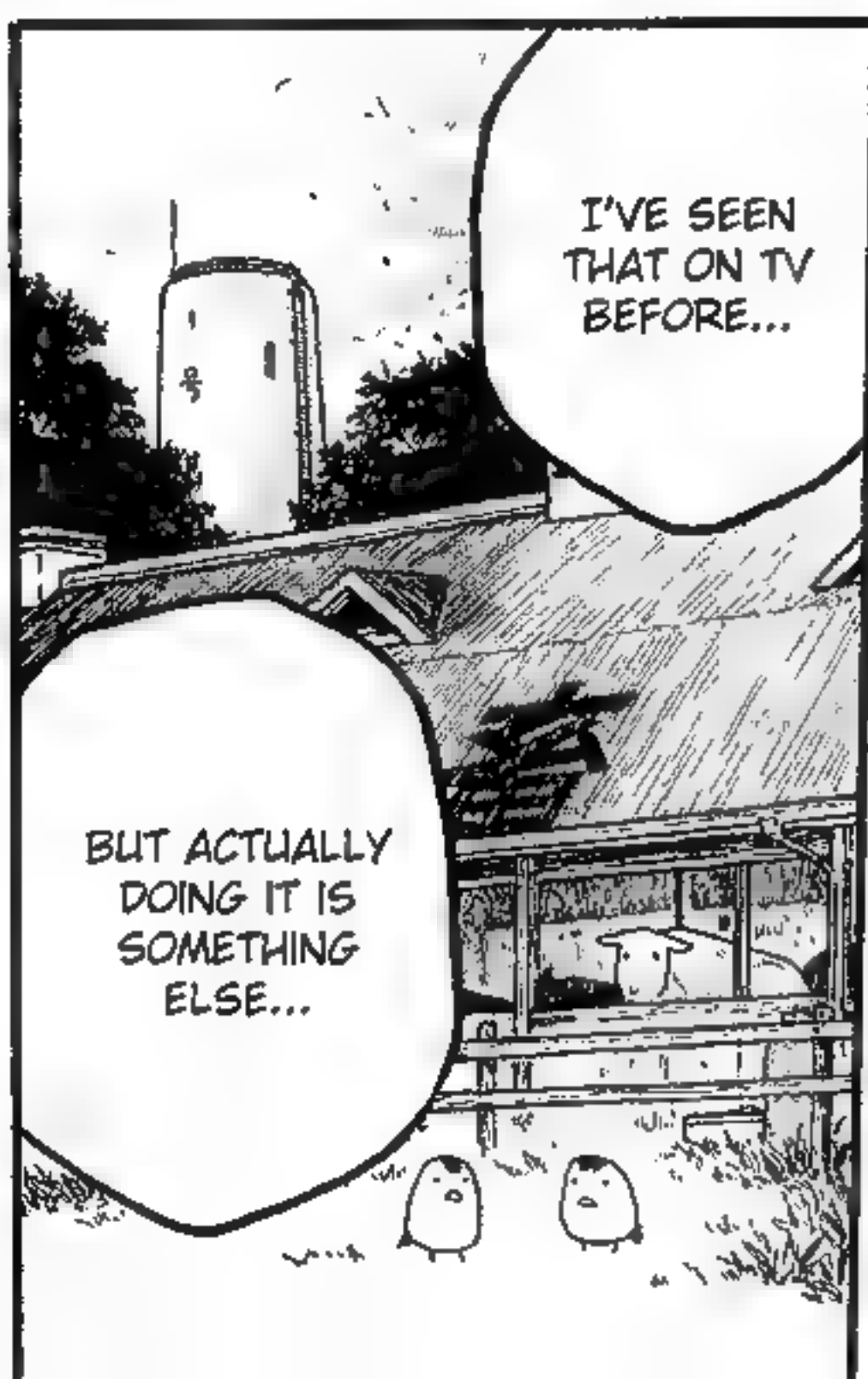
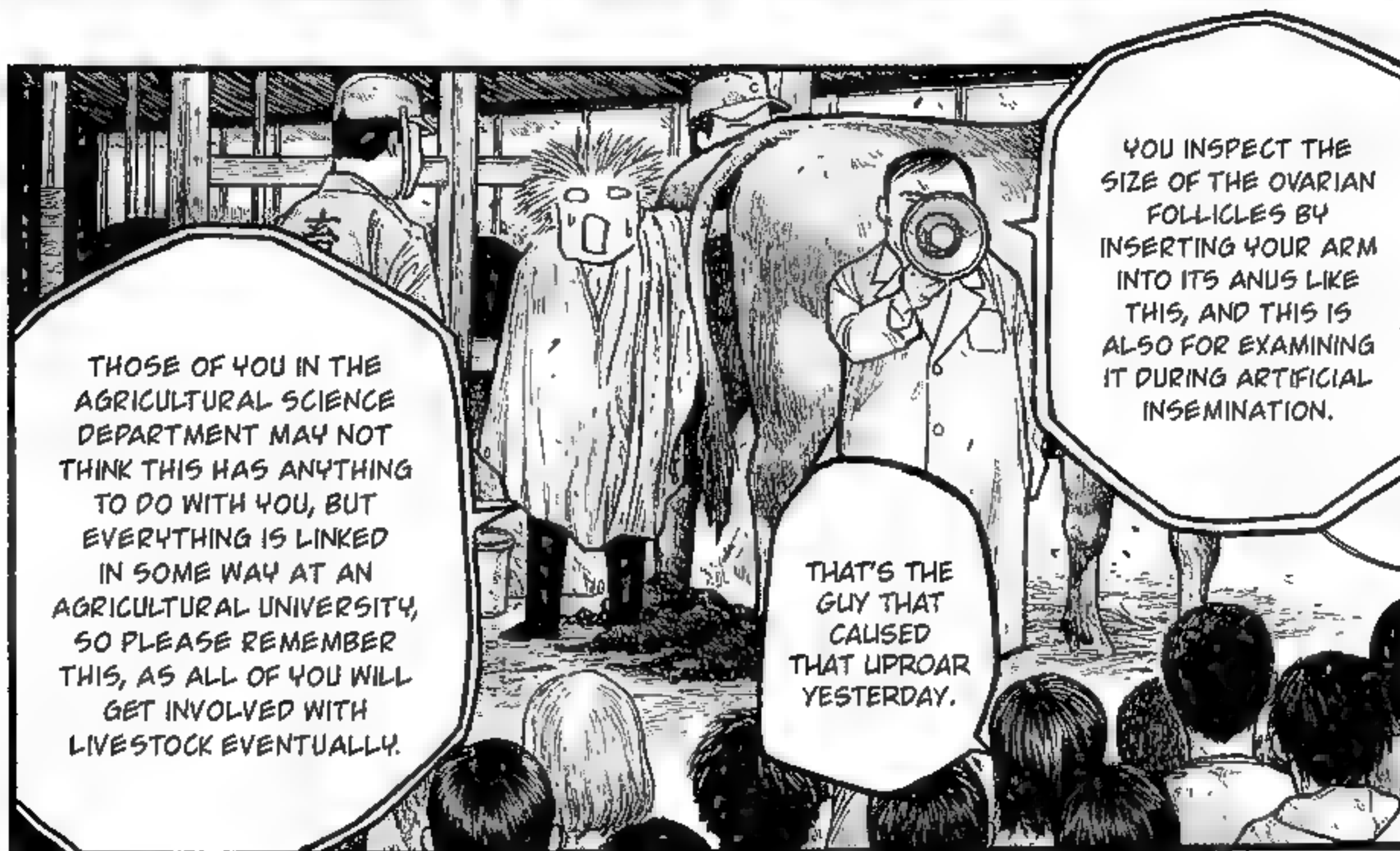
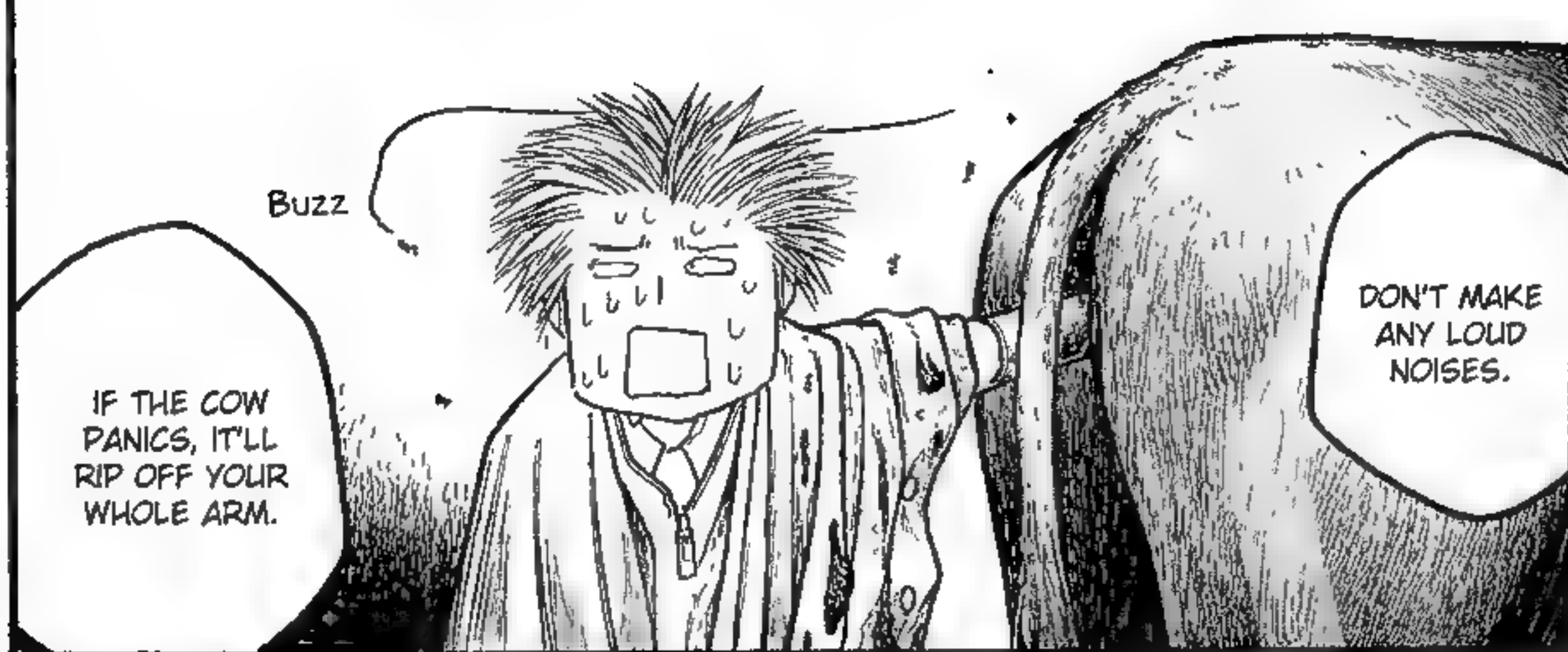


Haruka Hasegawa
She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She's not an S&M dom.atrix.



A. oryzae
It's also known as yellow mold. It often clings to Sawaki. Did it come from his home!?

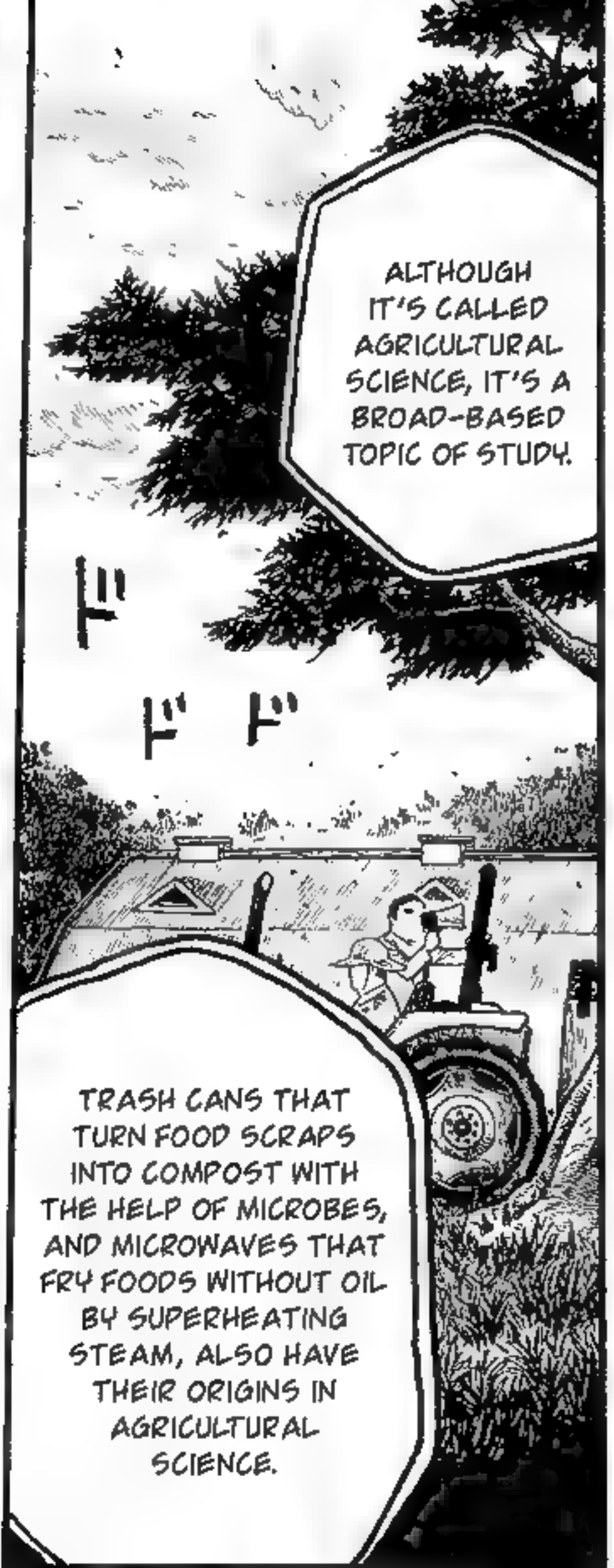






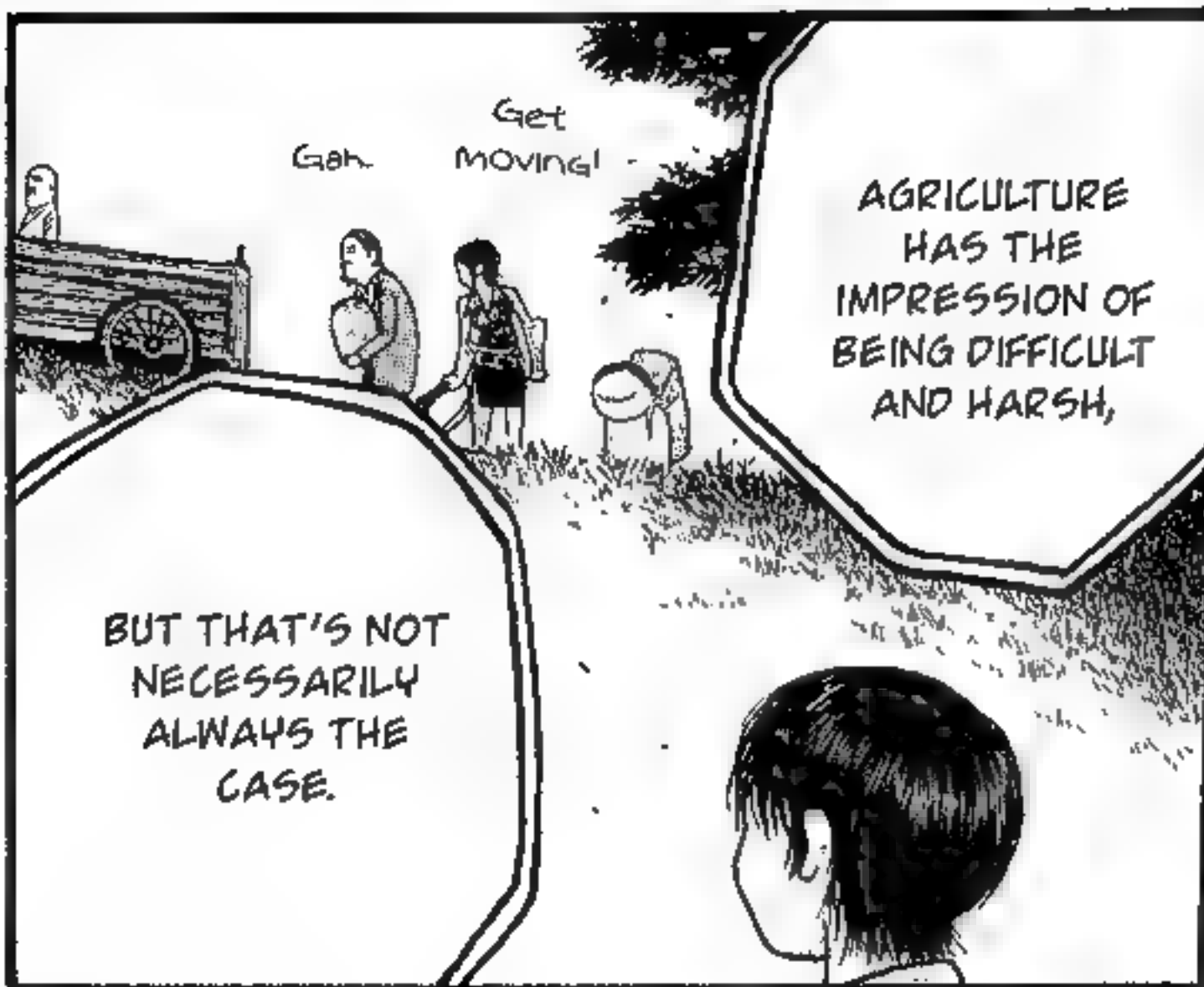
AH!

IT'S A FIELD OF STUDY THAT'S ON THE CUTTING EDGE OF SCIENCE.



ALTHOUGH IT'S CALLED AGRICULTURAL SCIENCE, IT'S A BROAD-BASED TOPIC OF STUDY.

TRASH CANS THAT TURN FOOD SCRAPS INTO COMPOST WITH THE HELP OF MICROBES, AND MICROWAVES THAT FRY FOODS WITHOUT OIL BY SUPERHEATING STEAM, ALSO HAVE THEIR ORIGINS IN AGRICULTURAL SCIENCE.

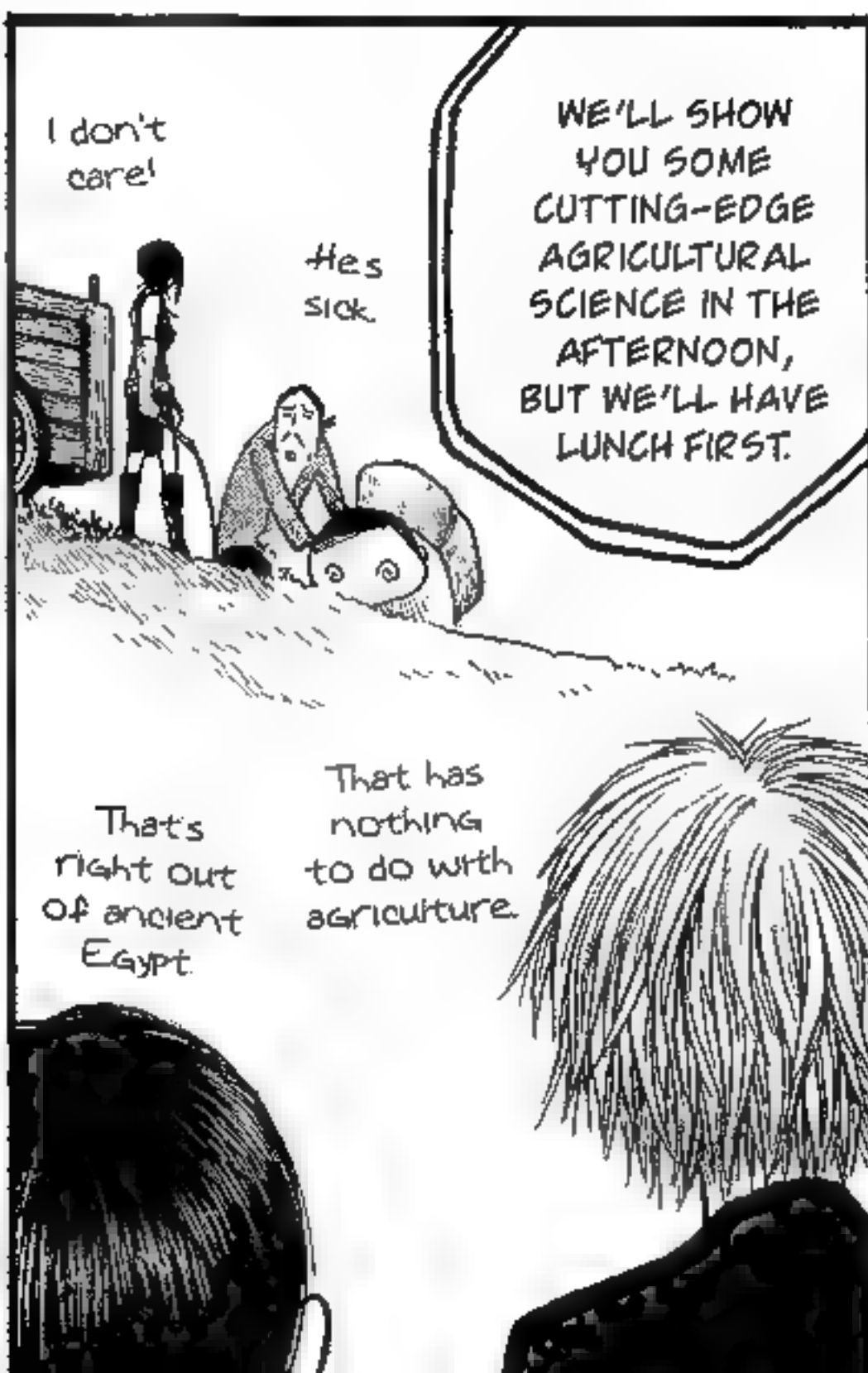


Gah. Get moving!

AGRICULTURE HAS THE IMPRESSION OF BEING DIFFICULT AND HARSH,

BUT THAT'S NOT NECESSARILY ALWAYS THE CASE.

Kaoru Misato
He's a second-year. He loves sake, but he failed at homebrewing it, and now he has a large debt.



I don't care!

He's sick.

WE'LL SHOW YOU SOME CUTTING-EDGE AGRICULTURAL SCIENCE IN THE AFTERNOON, BUT WE'LL HAVE LUNCH FIRST.

That's right out of ancient Egypt.

That has nothing to do with agriculture.

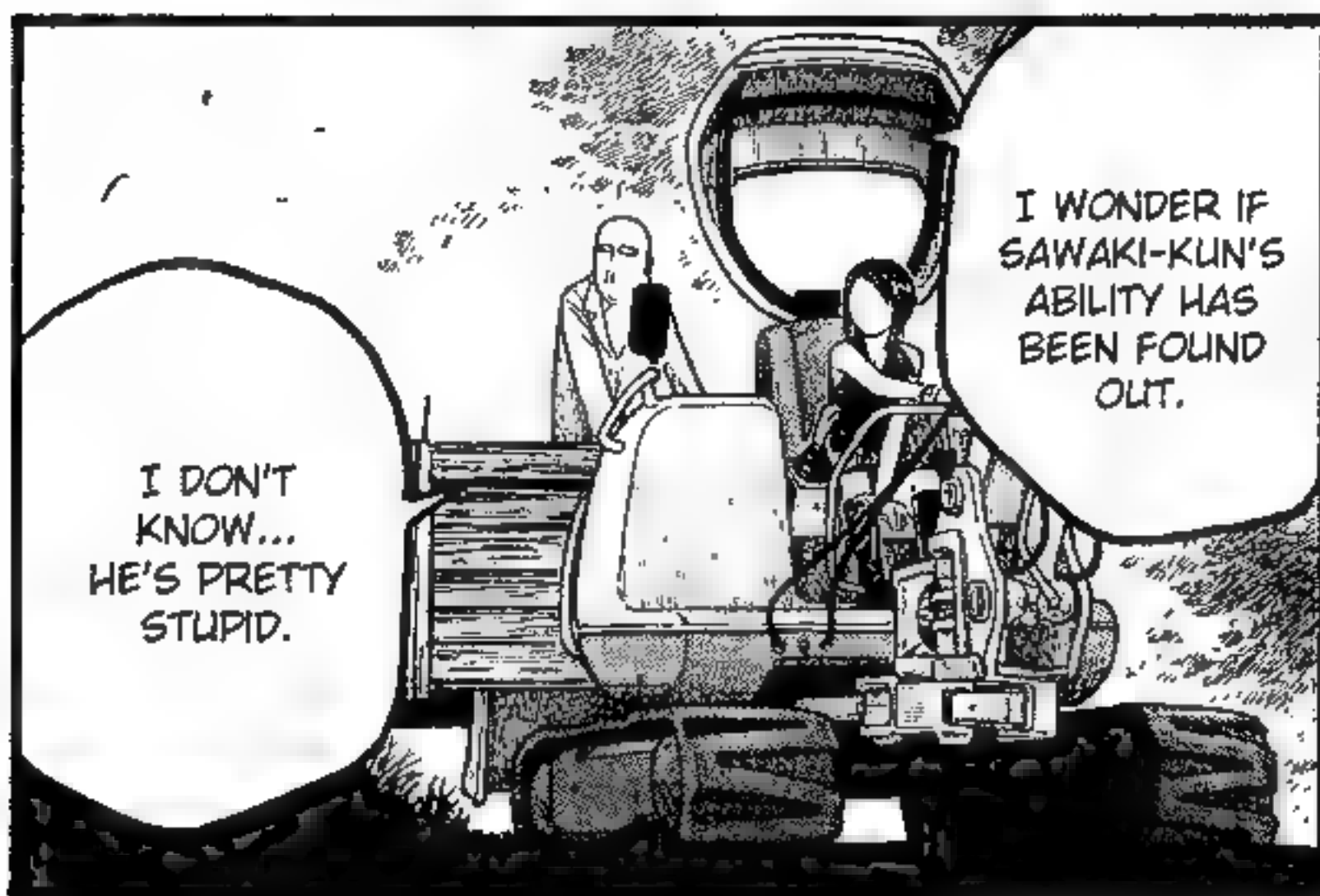
Takuma Kawahama
He's a second-year. He's in debt along with Misato. He caught a cold from a rinovirus the day before.

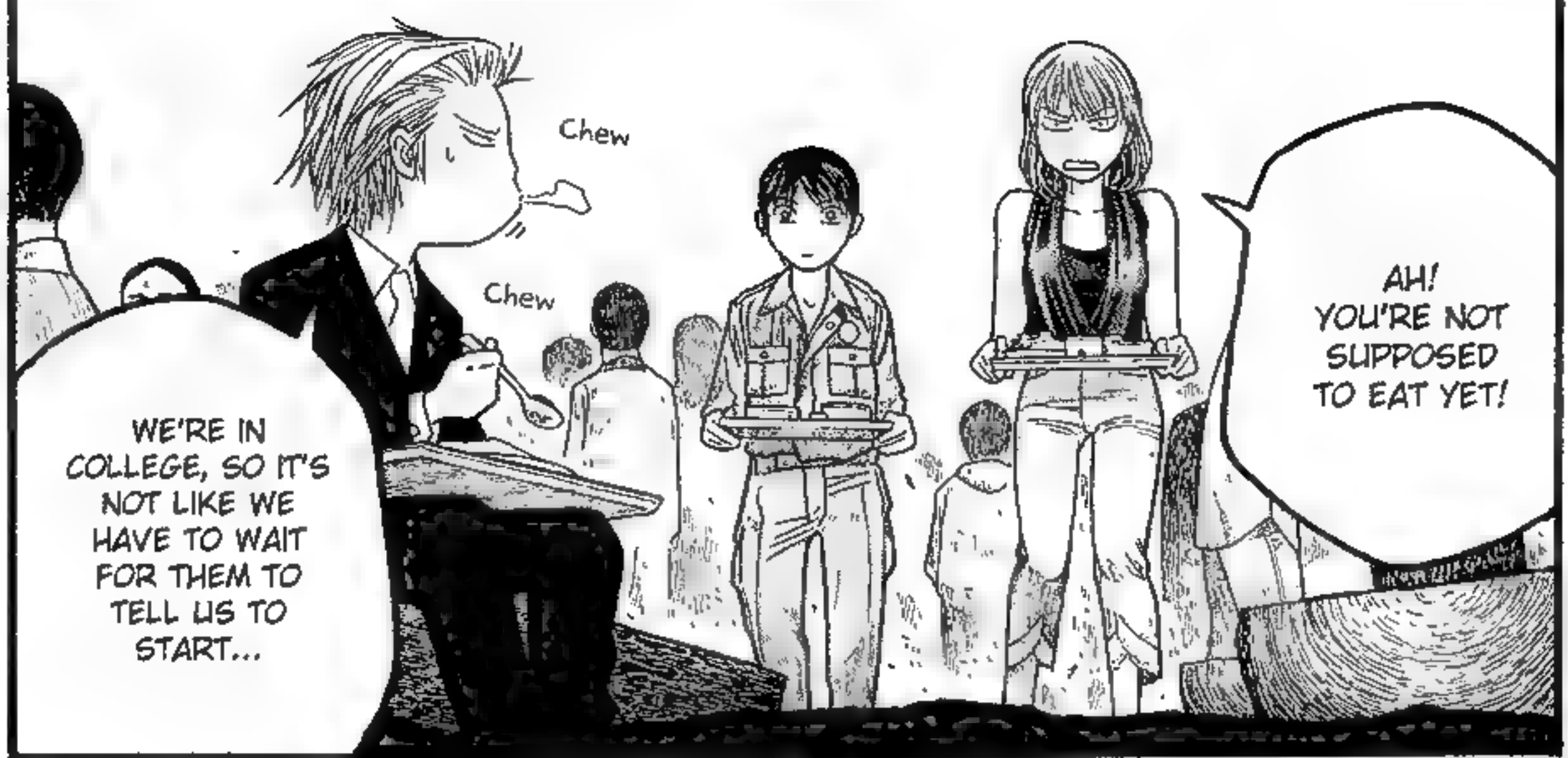


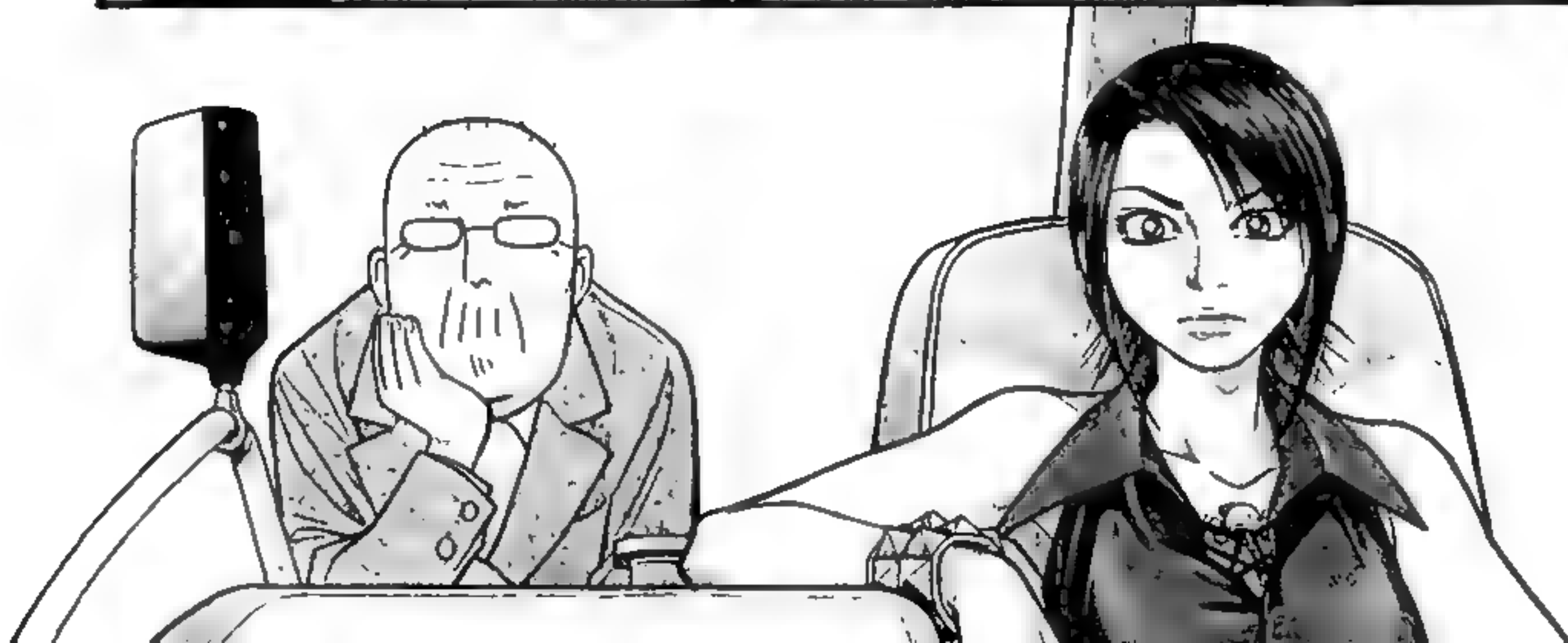
Crack

COME ON! THE SUN'S GONNA SET!

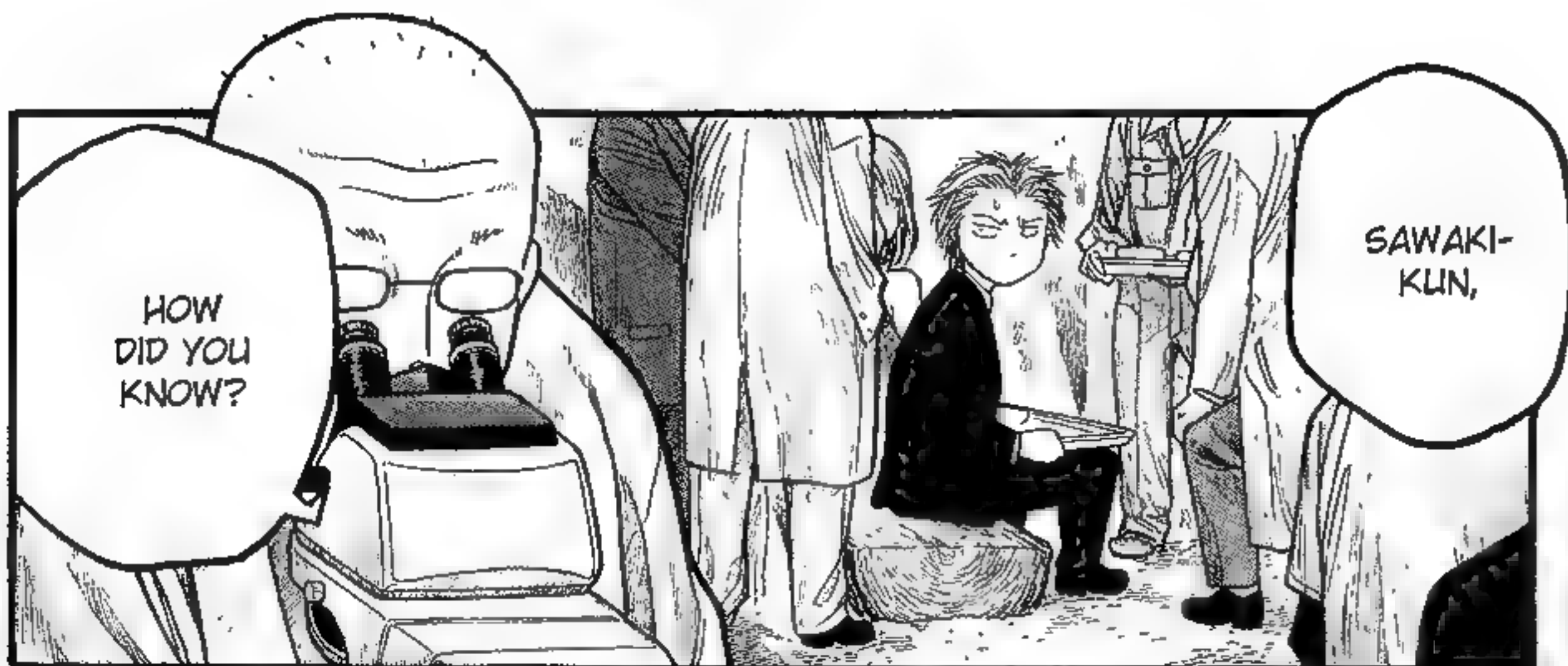
YOU'RE GETTING PAID BY THE HOUR, SO GET TO WORK!



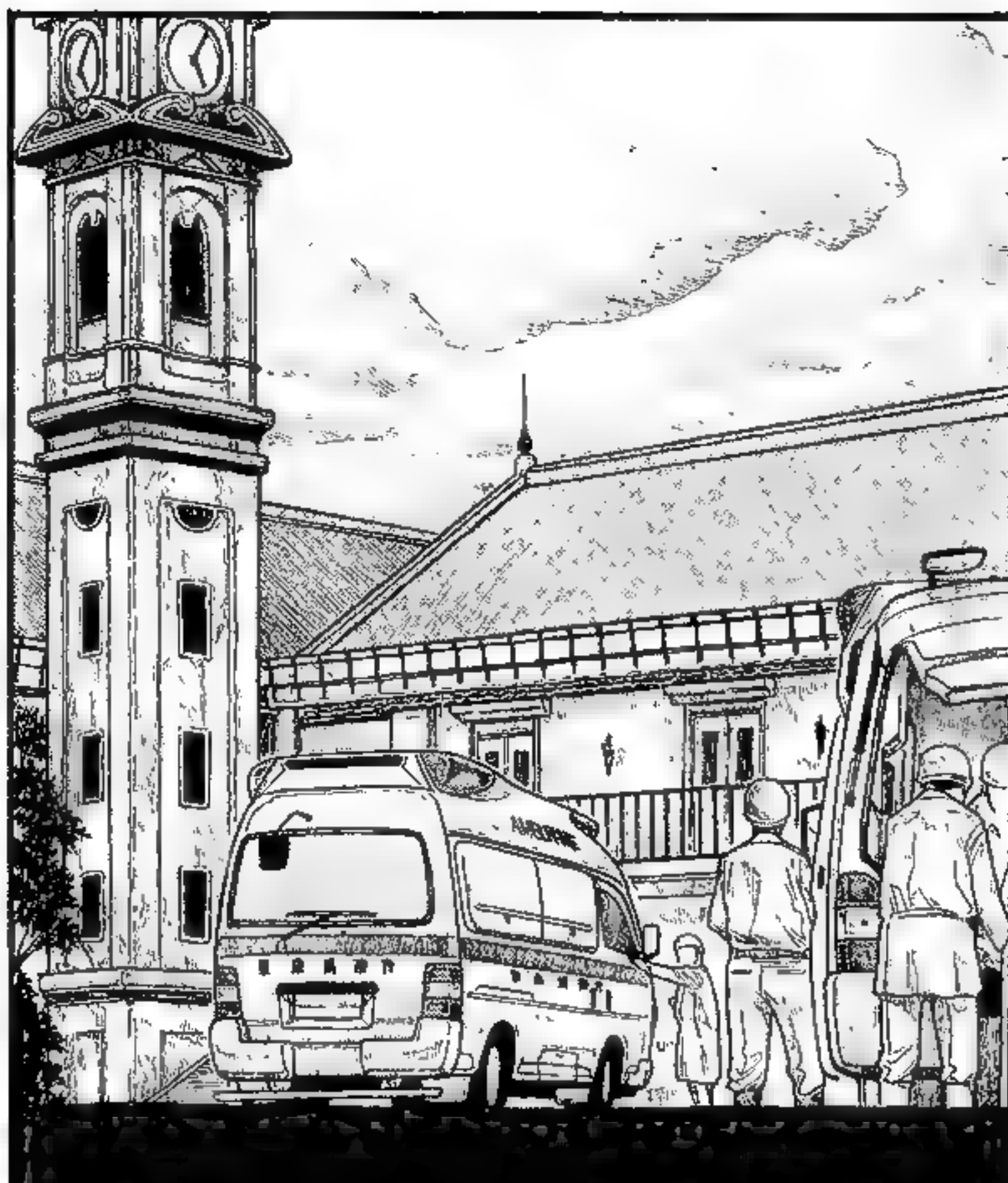








O-157
(Enterohemorrhagic
E. coli)
Even in
the author's
hometown of
Sakai, there
was a big
uproar a few
years ago
because of
these guys





BUT HAVE THE
TEACHERS KEEP
WATCH OVER THE
STUDENTS UNTIL
THE INCUBATION
PERIOD LAPSES.

FORTUNATELY, YOU
CAUGHT IT BEFORE
ANYONE ATE, SO I
DON'T THINK IT'S
ANYTHING TO BE
CONCERNED ABOUT,



SAWAKI-
KUN.



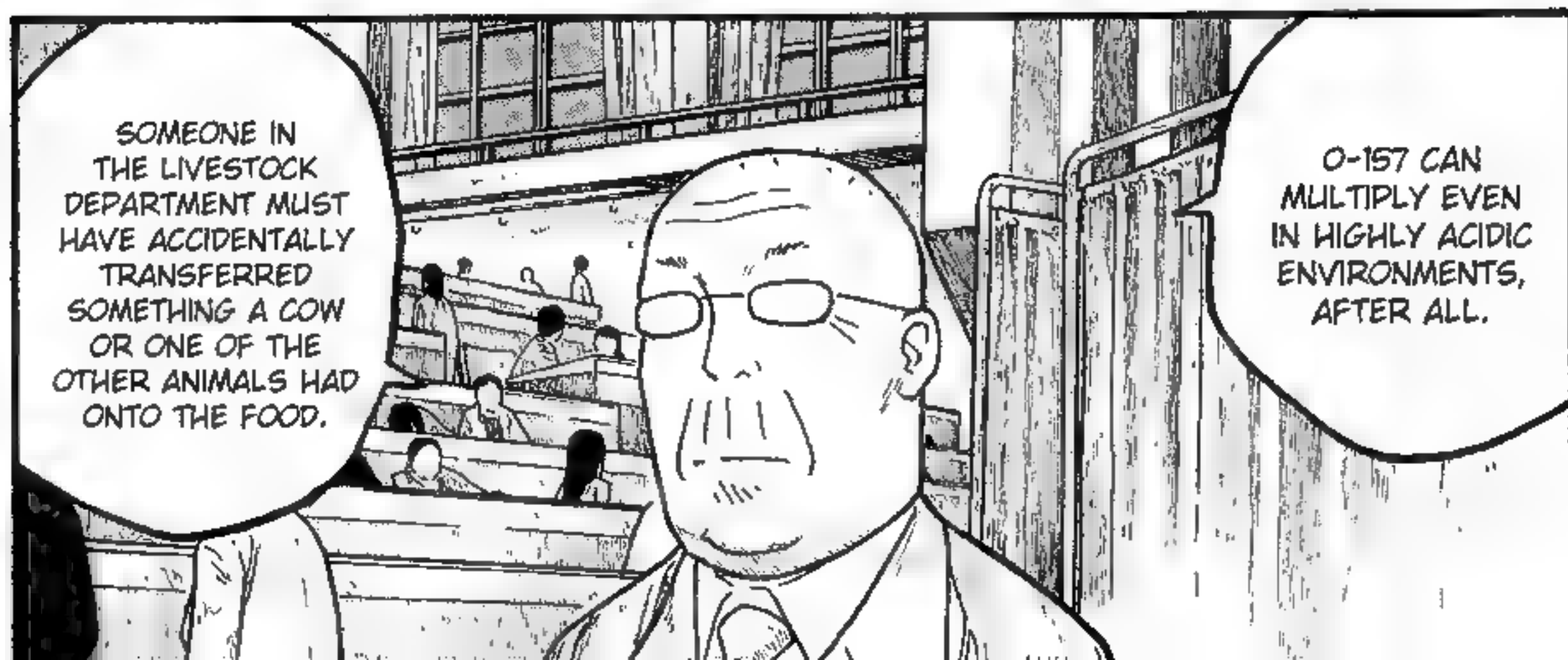
ANYONE THAT
HASN'T SEEN A
DOCTOR YET,
RAISE YOUR
HANDS!

PLEASE DON'T
REMOVE THE
STICKER ON
YOUR CHEST!



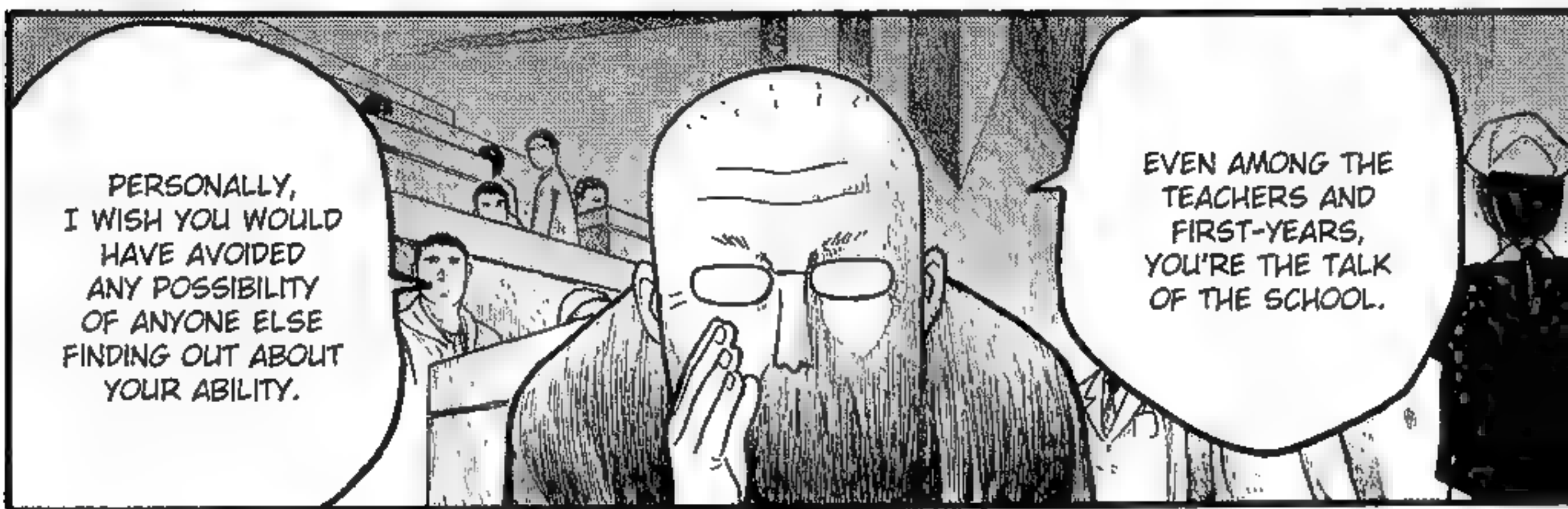
IF THAT ONE
HADN'T BEEN IN
THERE, I WOULD
HAVE THOUGHT
THEY WERE
JUST NORMAL
MICROBES.

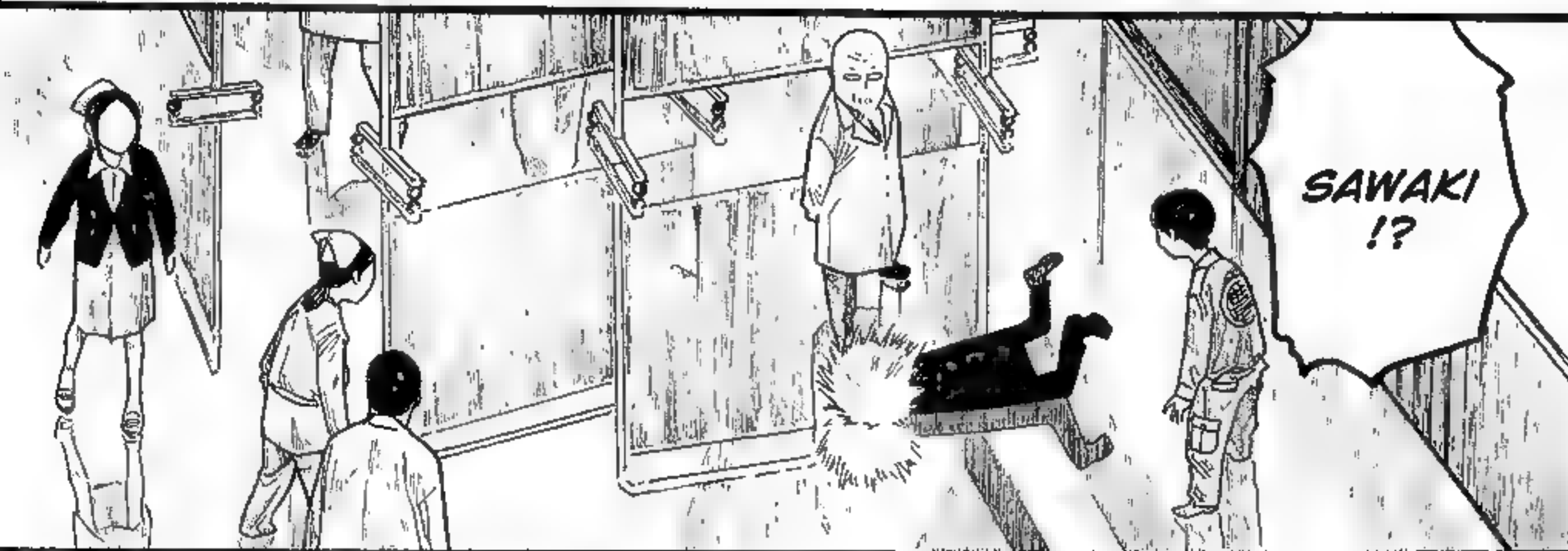
IT WAS
THE SALAD
DRESSING...

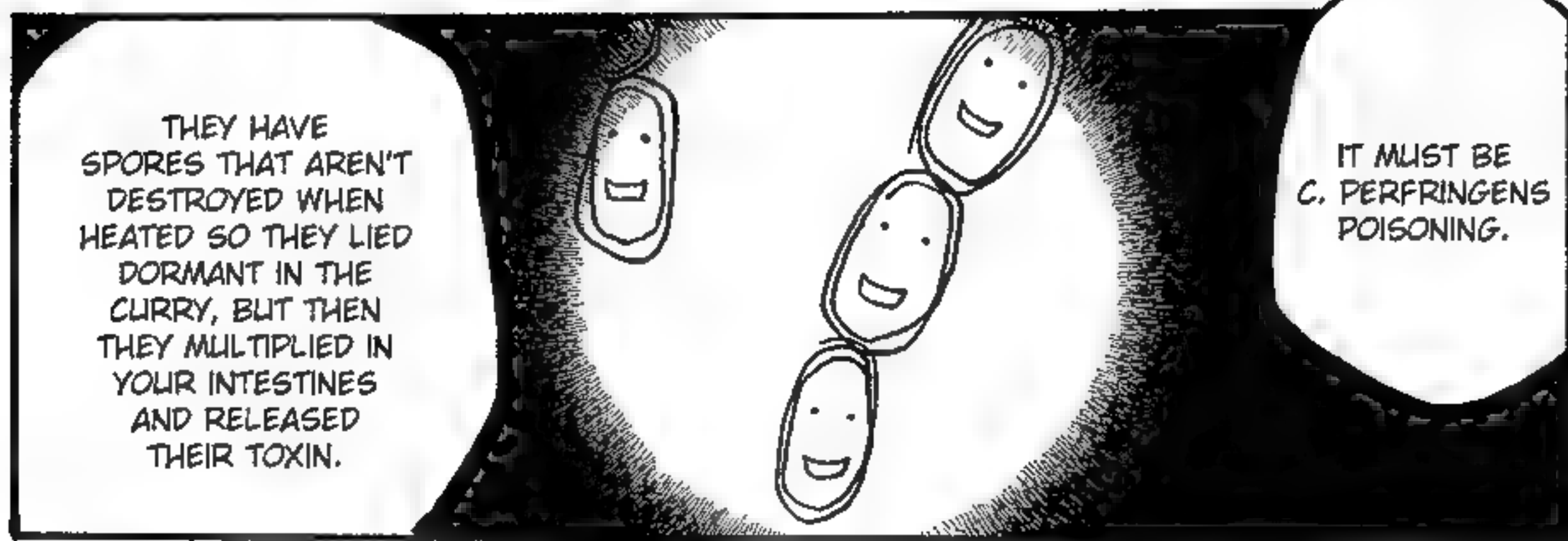


SOMEONE IN
THE LIVESTOCK
DEPARTMENT MUST
HAVE ACCIDENTALLY
TRANSFERRED
SOMETHING A COW
OR ONE OF THE
OTHER ANIMALS HAD
ONTO THE FOOD.

O-157 CAN
MULTIPLY EVEN
IN HIGHLY ACIDIC
ENVIRONMENTS,
AFTER ALL.



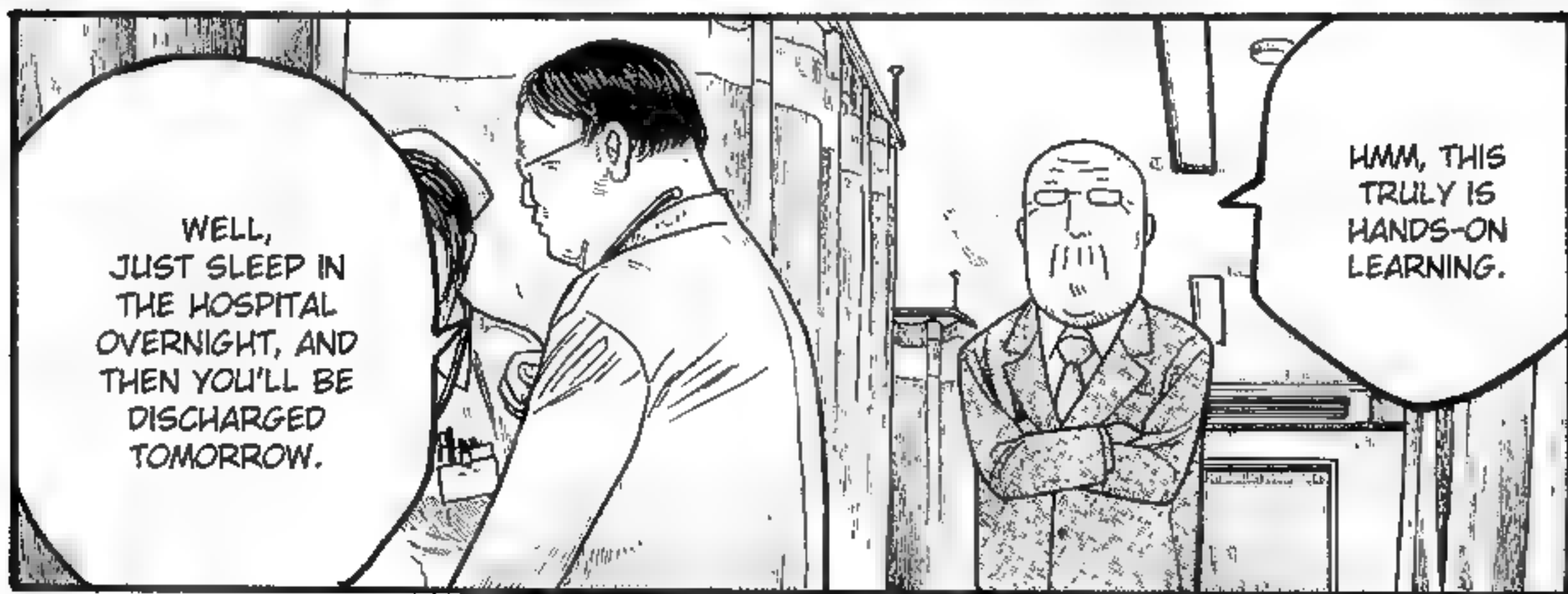




THEY HAVE SPORES THAT AREN'T DESTROYED WHEN HEATED SO THEY LIED DORMANT IN THE CURRY, BUT THEN THEY MULTIPLIED IN YOUR INTESTINES AND RELEASED THEIR TOXIN.

IT MUST BE C. PERFRINGENS POISONING.

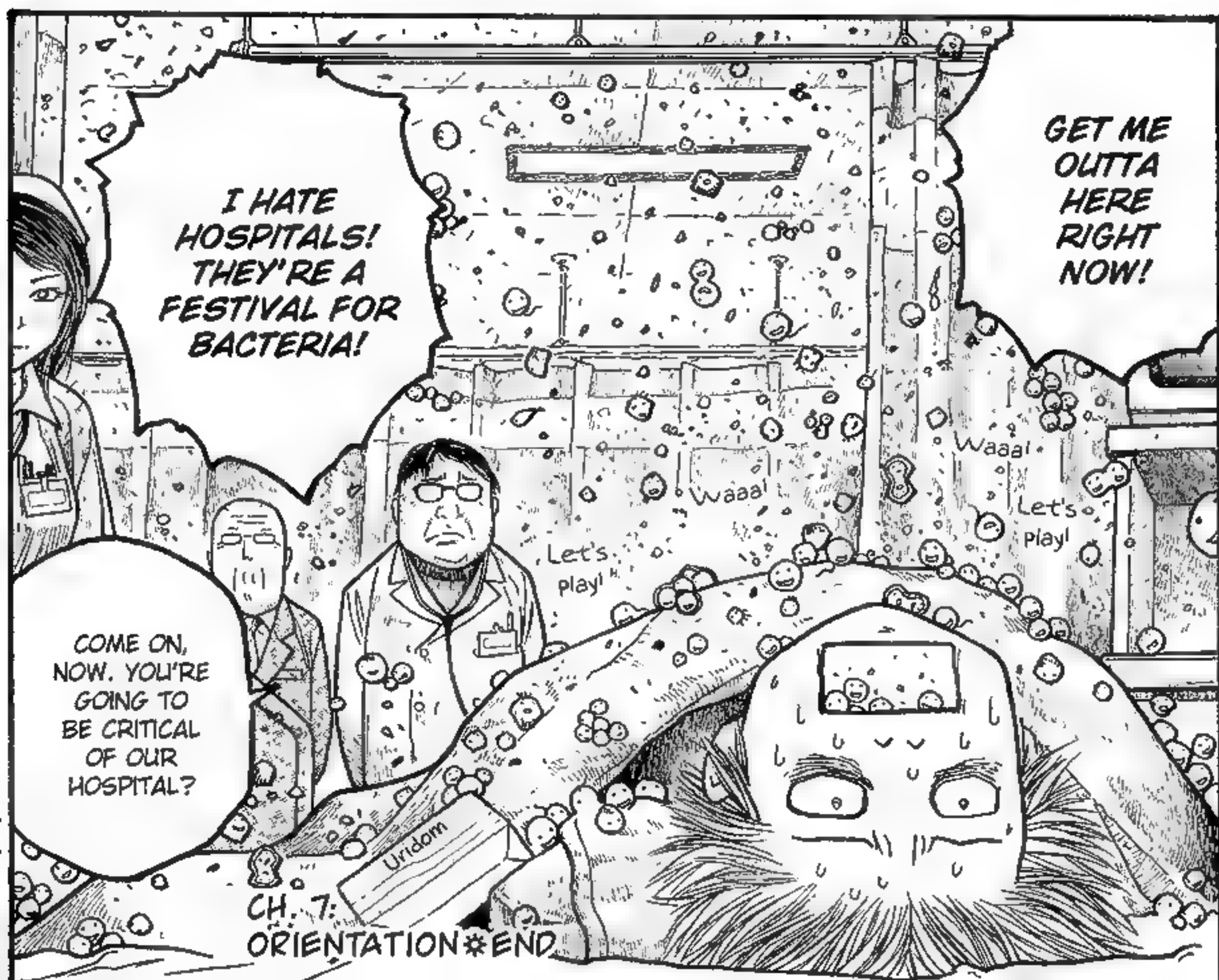
C.
perfringens
This is bacteria found in soil. There are quite a lot of people who carry this bacteria in them. However, only a small fraction of these guys cause food poisoning.



WELL, JUST SLEEP IN THE HOSPITAL OVERNIGHT, AND THEN YOU'LL BE DISCHARGED TOMORROW.

HMM, THIS TRULY IS HANDS-ON LEARNING.

S.
epidermidis
This is Staphylococcus that lives on your skin.



I HATE HOSPITALS! THEY'RE A FESTIVAL FOR BACTERIA!

GET ME OUTTA HERE RIGHT NOW!

COME ON, NOW. YOU'RE GOING TO BE CRITICAL OF OUR HOSPITAL?

MRSA
Methicillin-resistant S. aureus.

P
aeruginosa
Also known as green pus bacteria.

VRE
Vancomycin-resistant Enterococcus

Although these are famous for causing infections in hospitals, they live in water, soil and even in peoples' noses, so if you're healthy, there is very little chance of you getting infected by these



Hachimitsu Scans

~sweeter than honey~

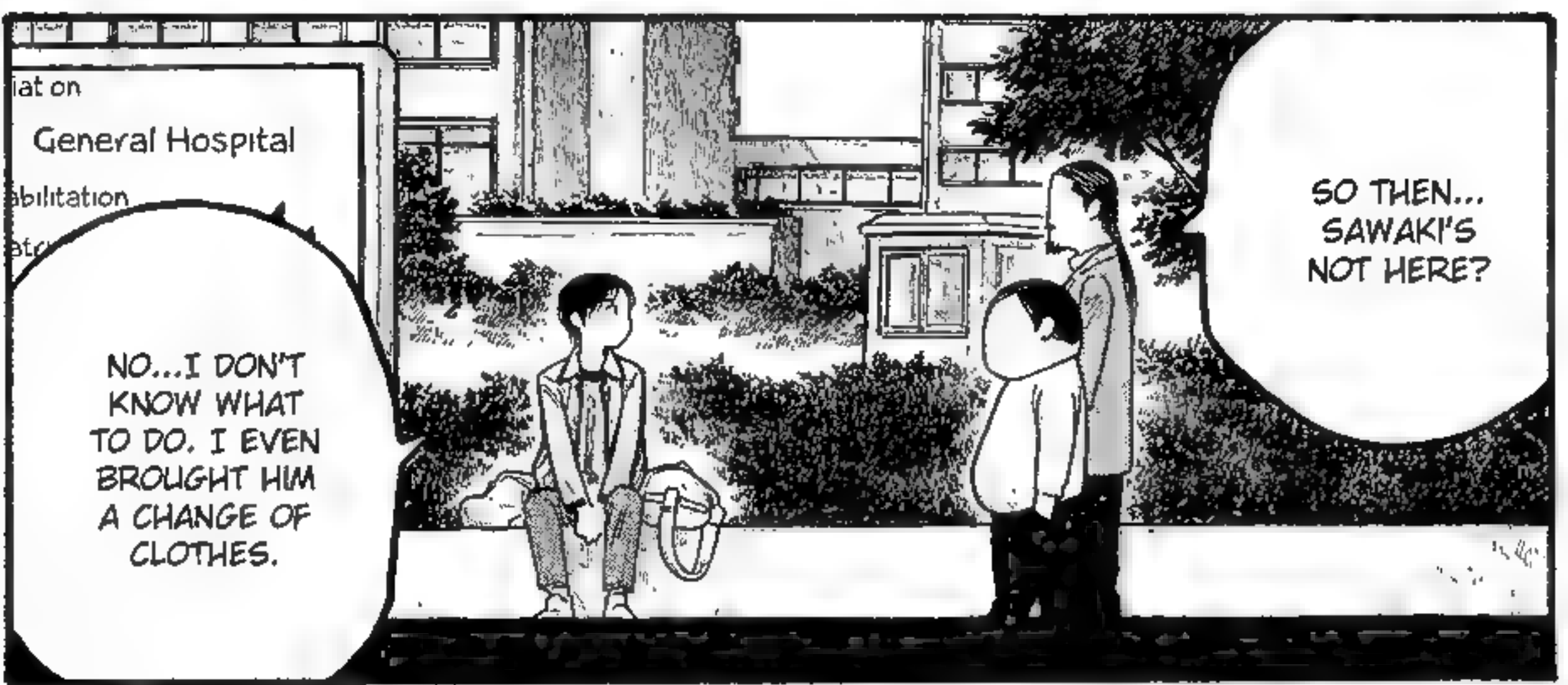
hachimitsu-scans.blogspot.com

What happened to Sawaki who was hospitalized for food poisoning on his second day at college?



THERE ARE A LOT OF SUSPICIOUS MICROBES IN THE HOSPITAL, SO HE'S HATED BEING IN THEM EVER SINCE HE WAS A KID.

HE TOLD ME TO COME GET HIM FIRST THING IN THE MORNING.



NO...I DON'T KNOW WHAT TO DO. I EVEN BROUGHT HIM A CHANGE OF CLOTHES.

SO THEN... SAWAKI'S NOT HERE?



DAMN IT... HE MUST ALREADY BE BACK AT ITSUKI'S LAB.

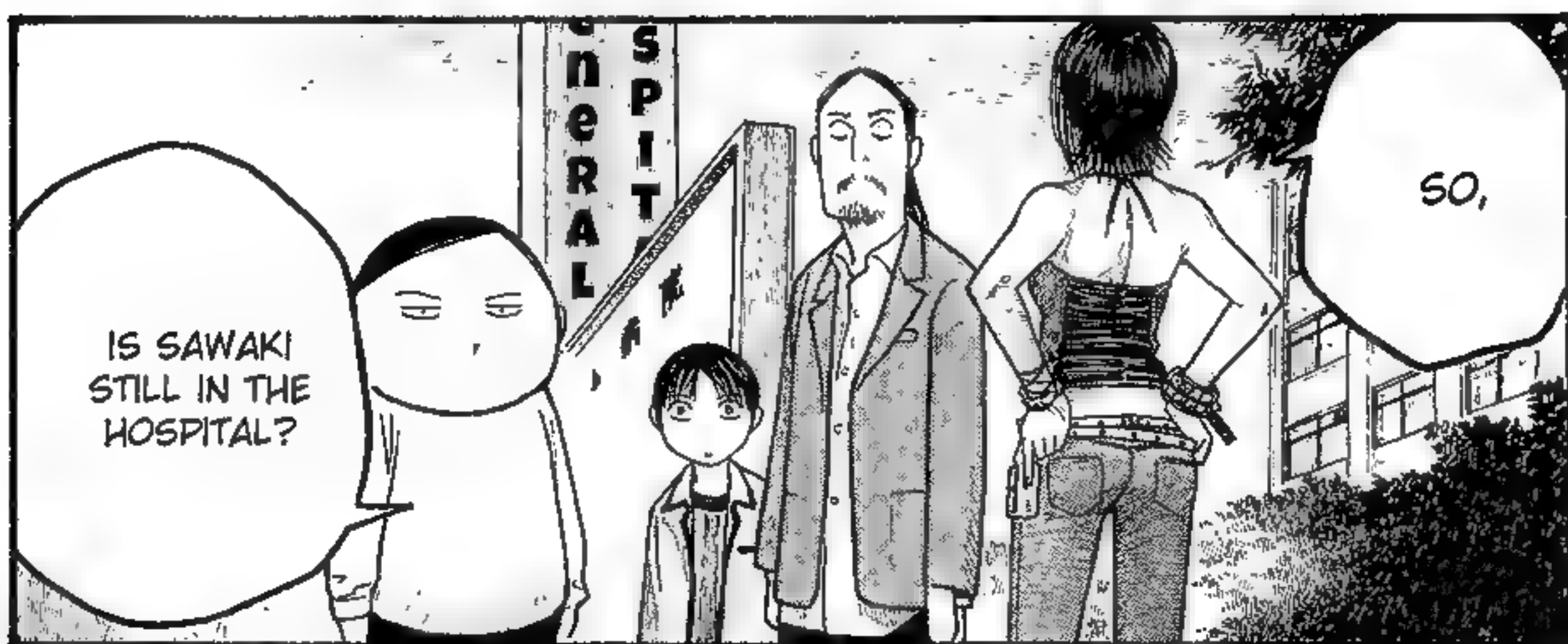
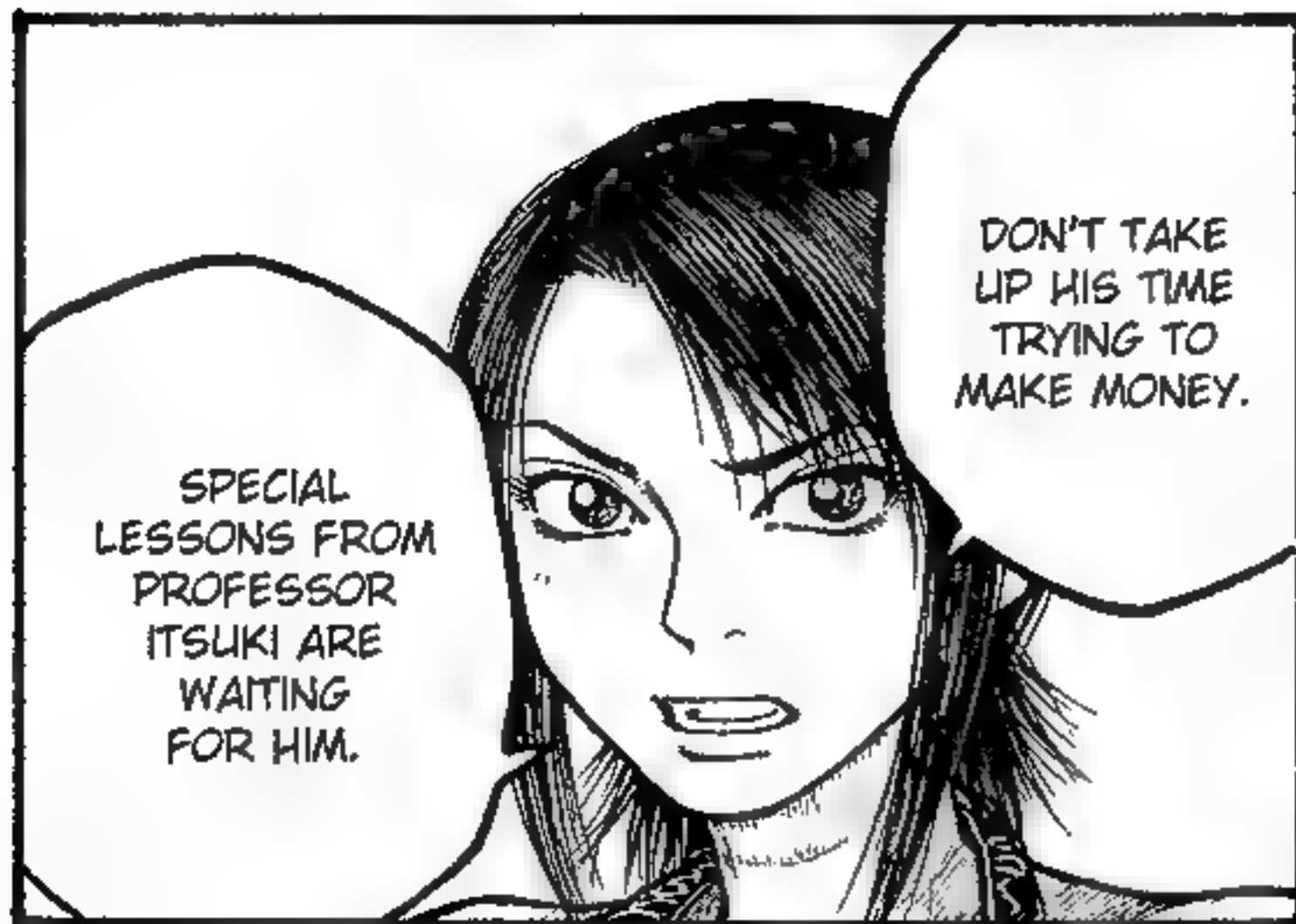
WE CAN'T DO ANYTHING ABOUT THE CATERPILLAR FUNGUS OR ITSUKI'S BILL WITHOUT HIM...

Click



JUST GREAT. HE MUST HAVE GOTTEN DISCHARGED FIRST THING IN THE MORNING.

CRAP... HE WON'T PICK UP HIS PHONE, EITHER.



I'm told this manga is very wordy.

農物語

TALES OF AGRICULTURE

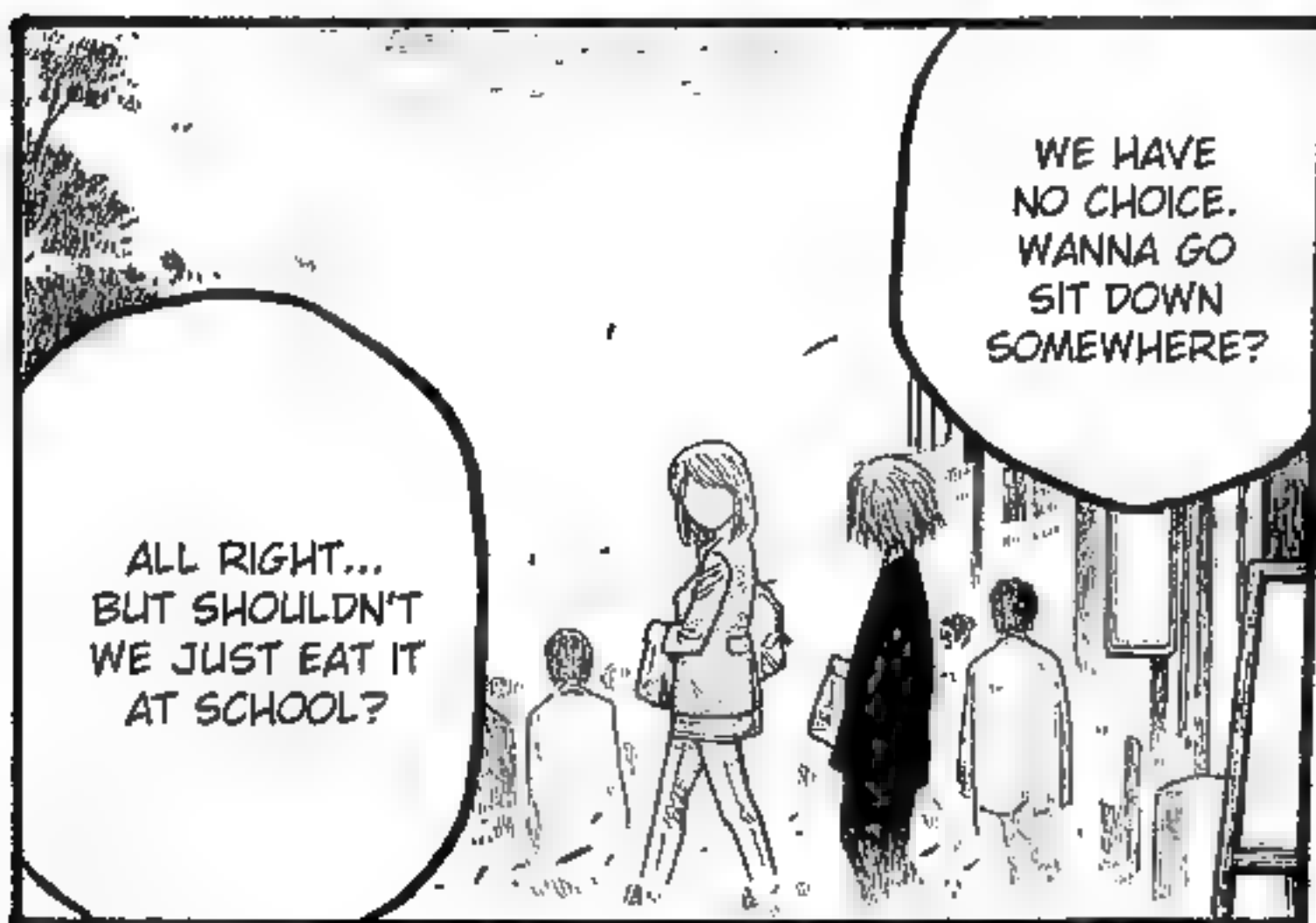



EVEN THOUGH I
JUST CAME TO SEE
YOU ON MY WAY TO
SCHOOL, WHY DID
YOU COME OUT
WITH ME?

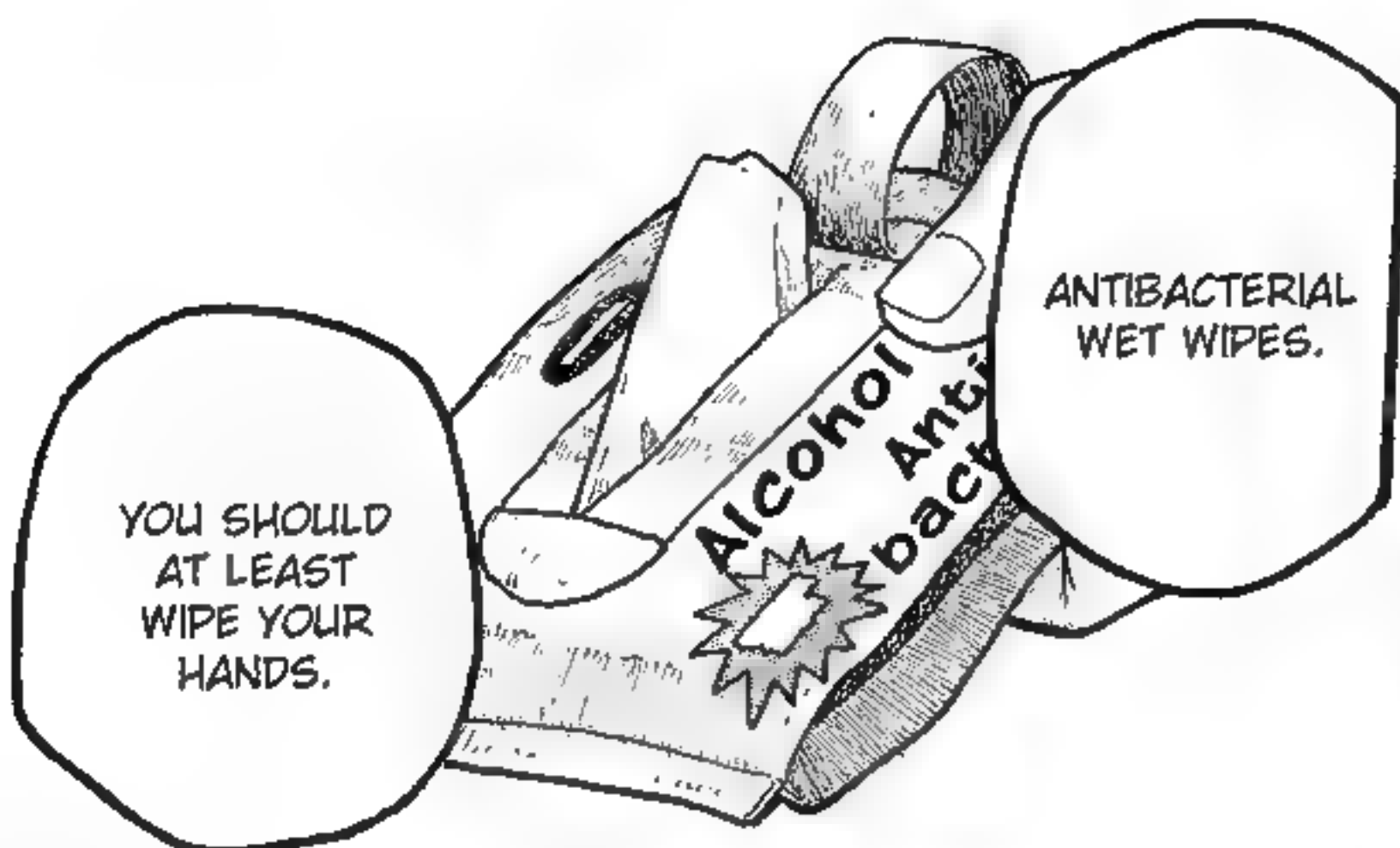
I-I CAN'T STOP
THINKING ABOUT
THOSE GERMS
AFTER GETTING FOOD
POISONING, SO I
DON'T WANT TO BE
ANYWHERE WITH A
TON OF MICROBES
LIKE A HOSPITAL!



CH. 8: ANTIBACTERIAL




Tadayasu Sawaki
He's the main character
For some reason, he can see microbes.
He was hospitalized in the last chapter for food poisoning.



A. oryzae

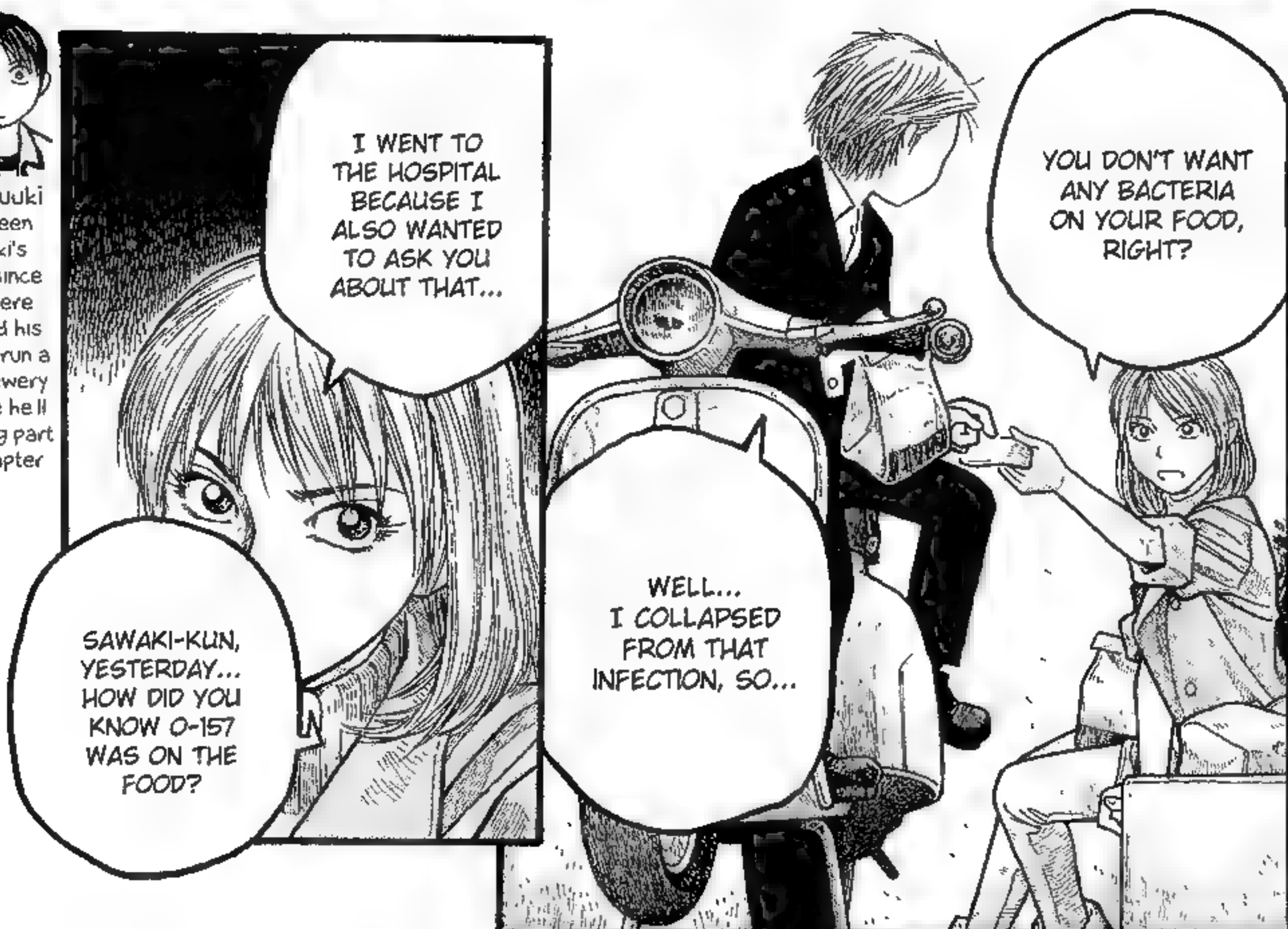
It's also known as yellow mold.

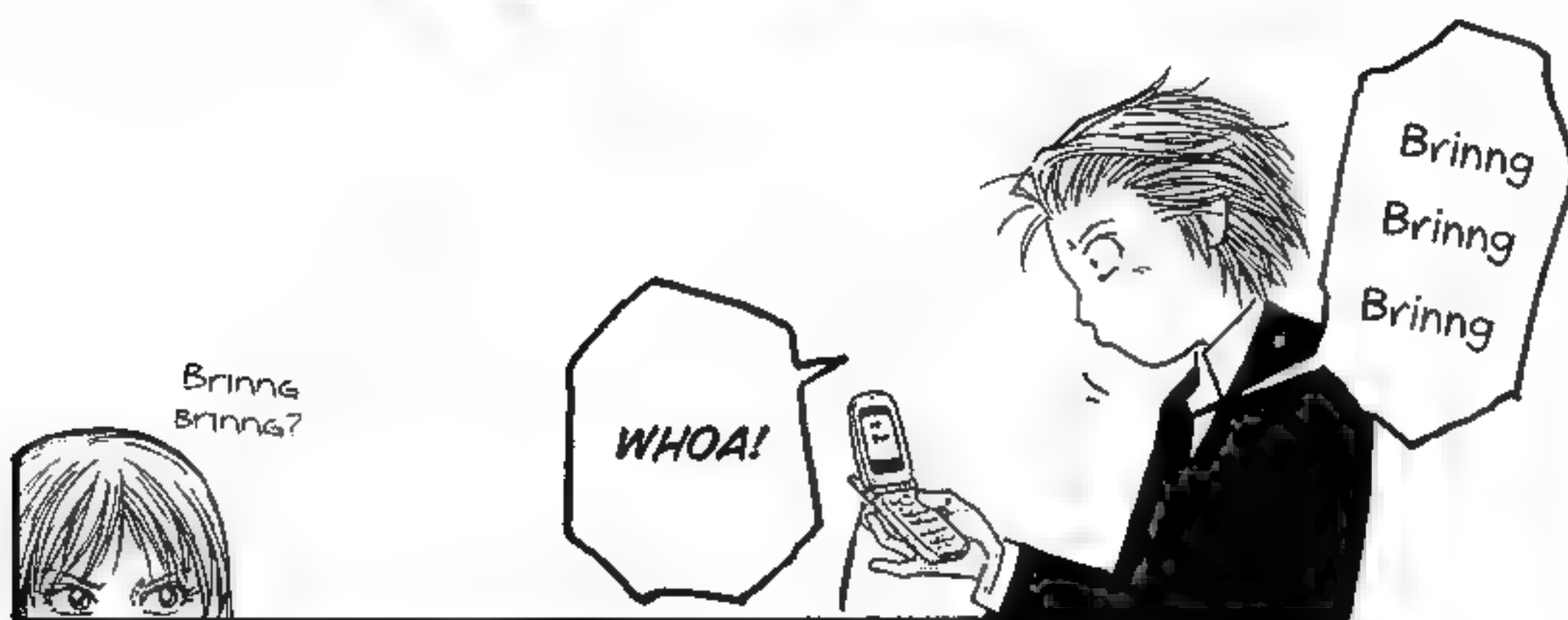
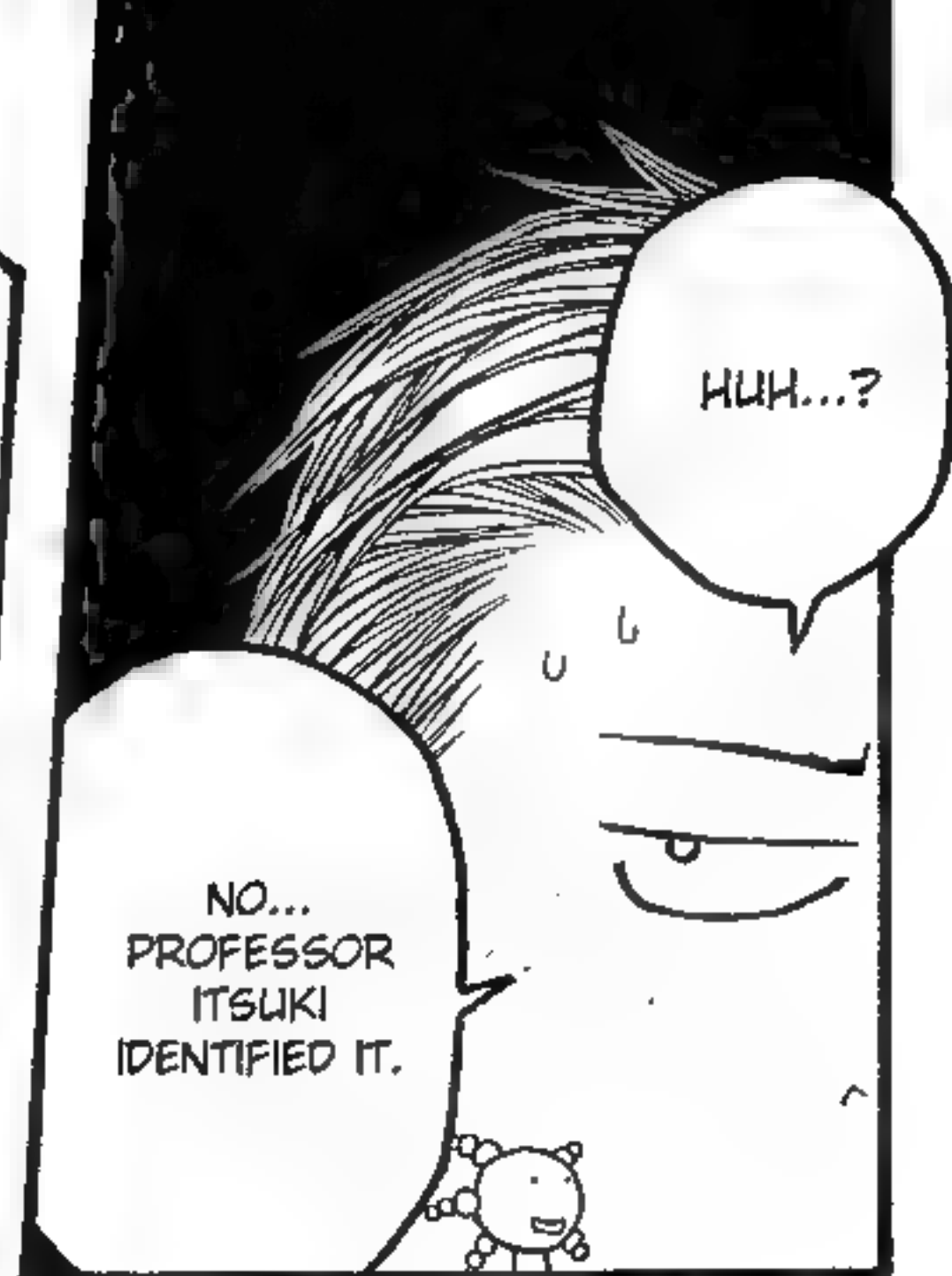
It often attaches itself to Sawaki! It talks a lot!?

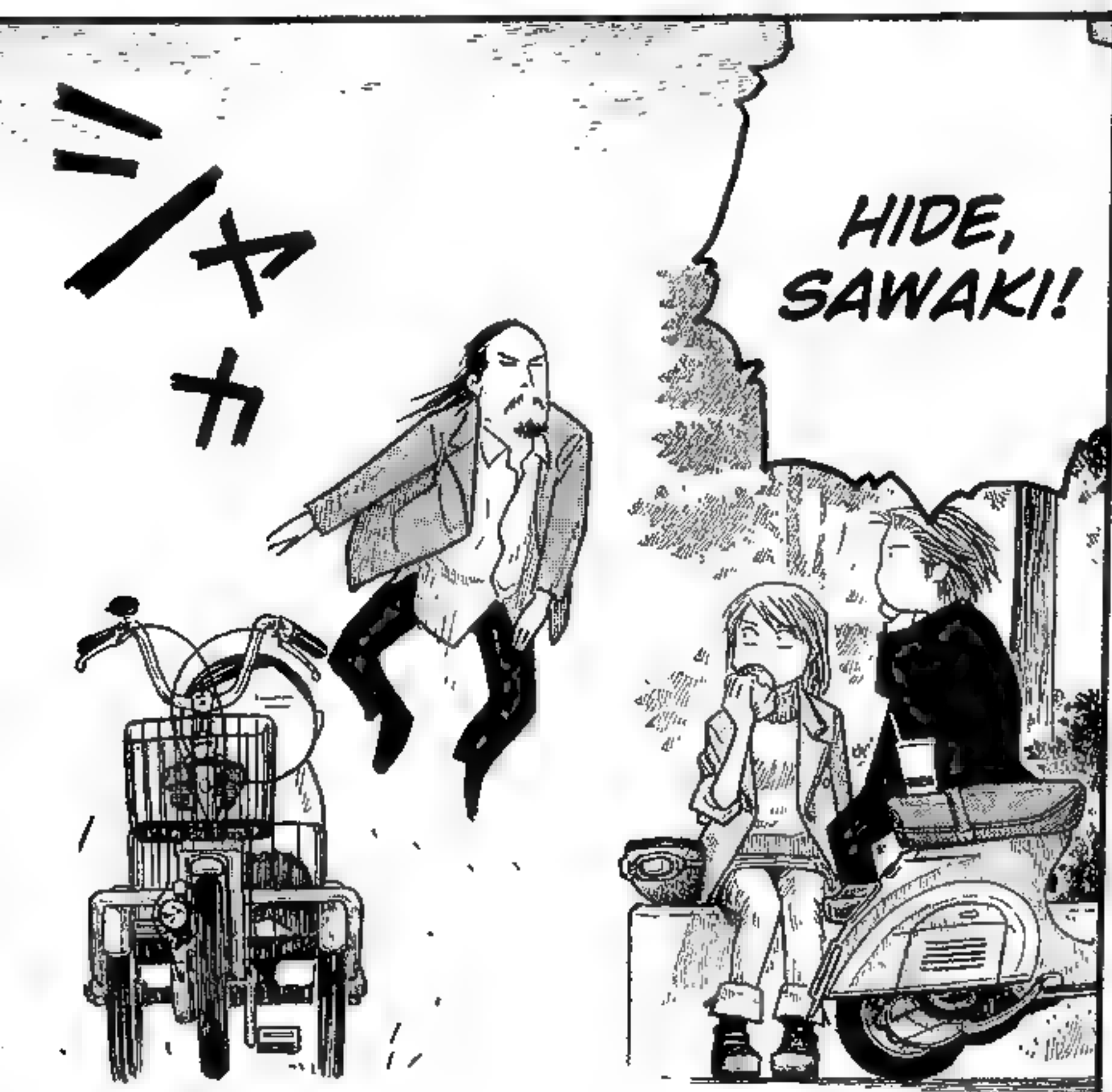
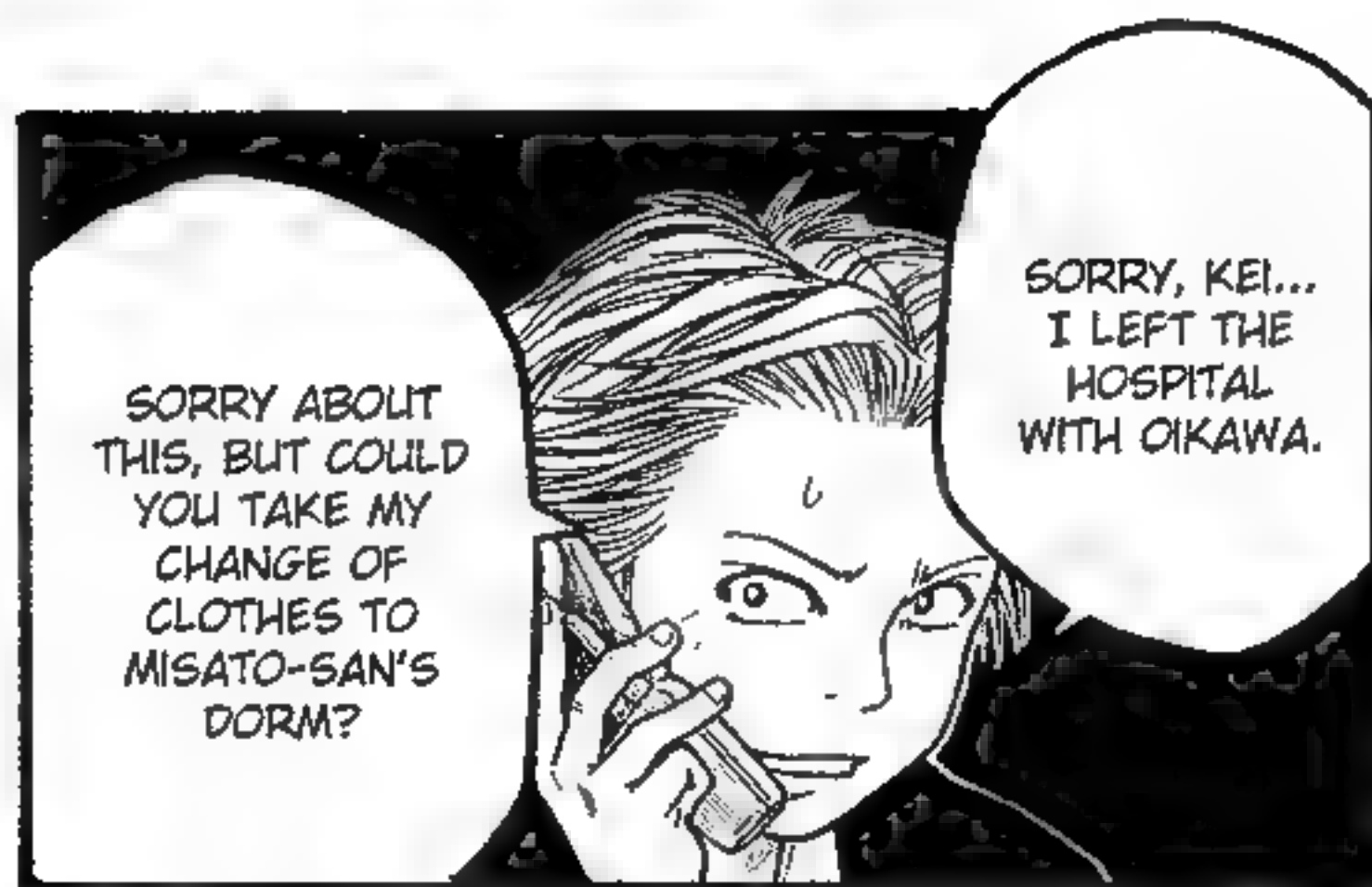
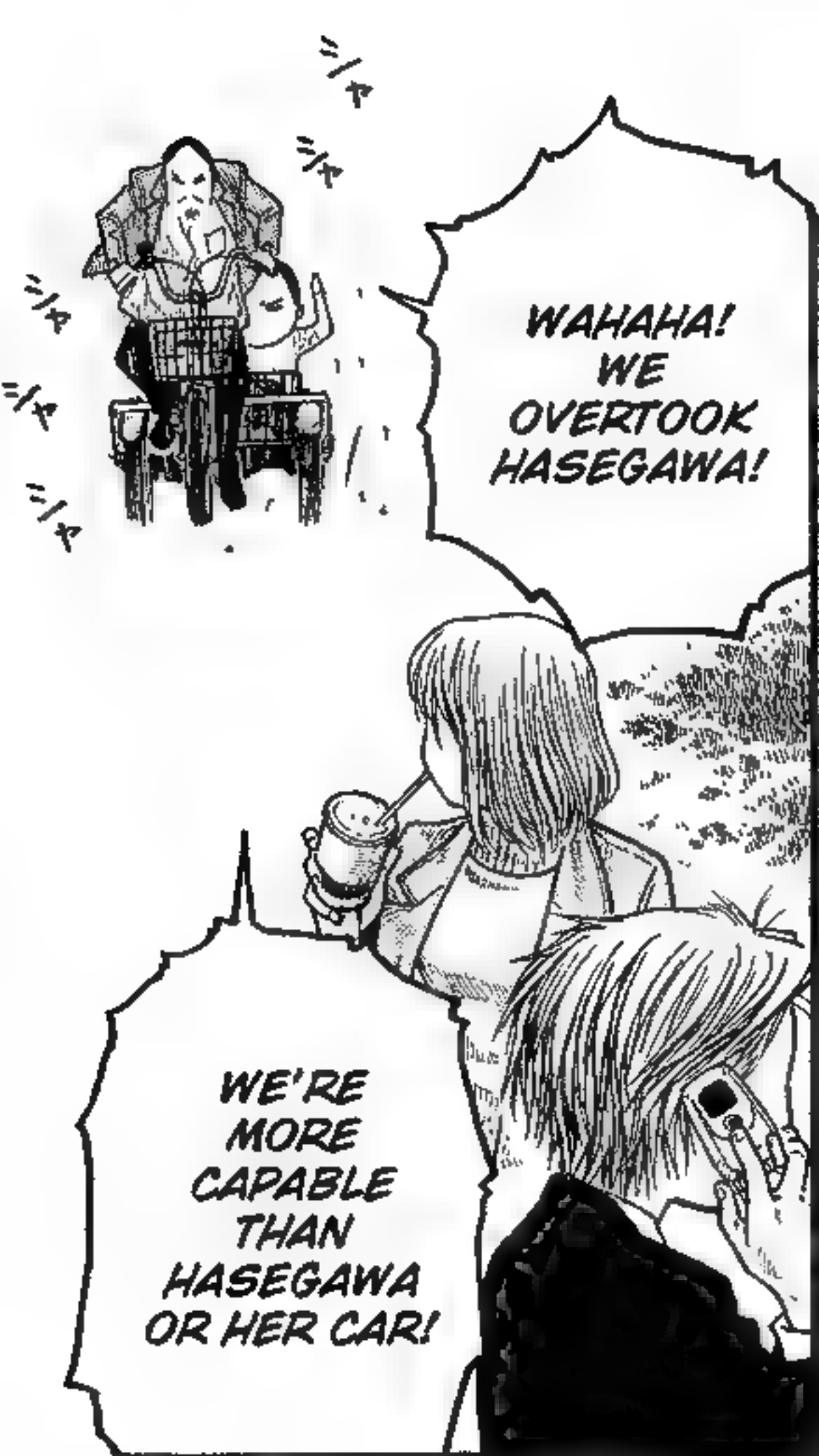


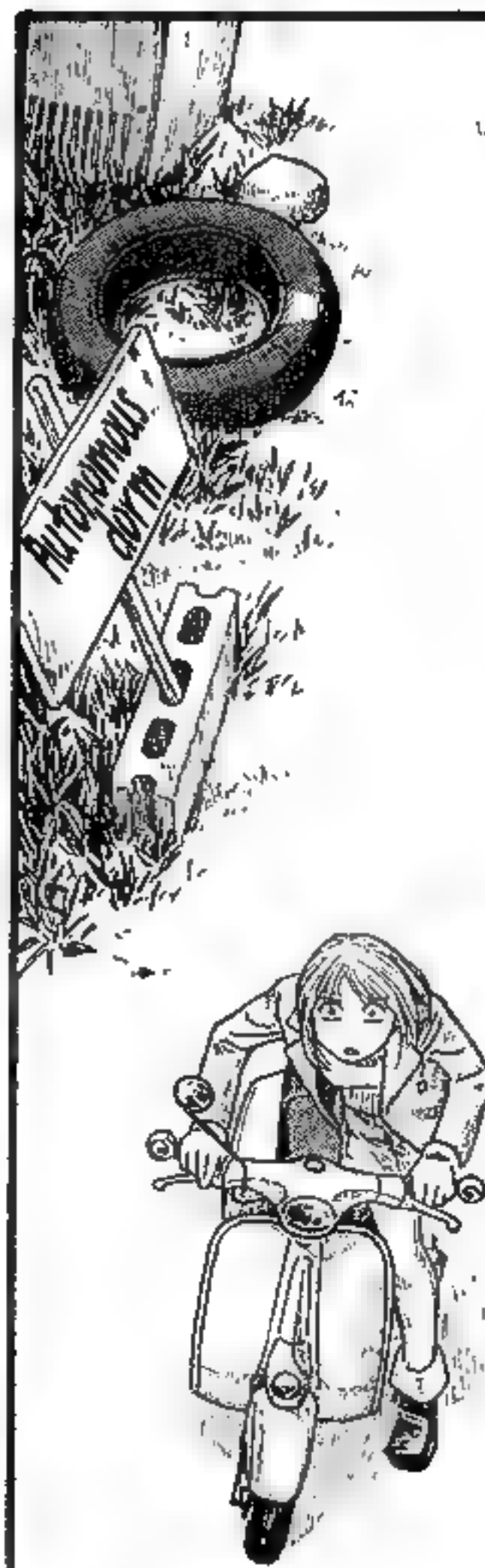
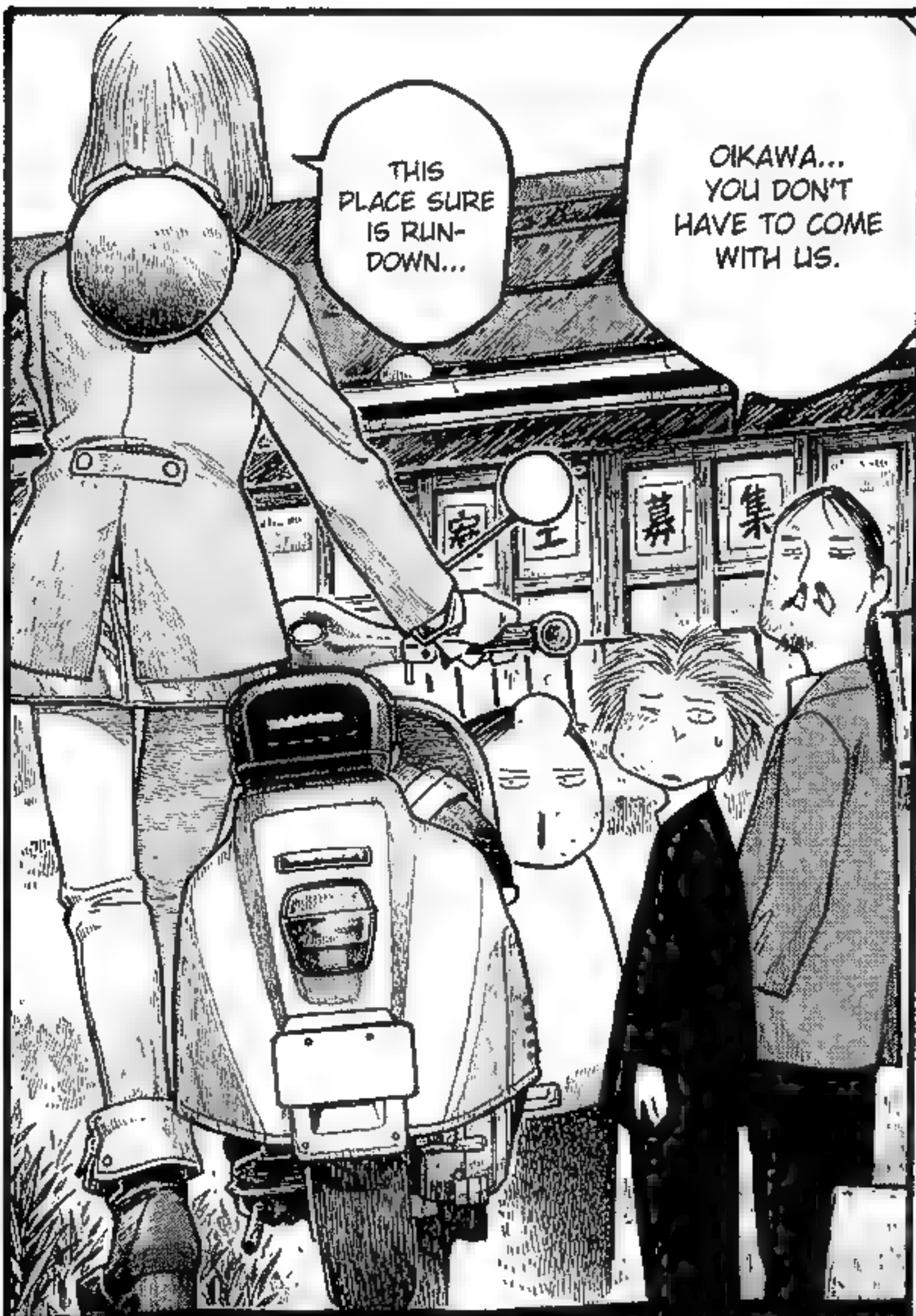
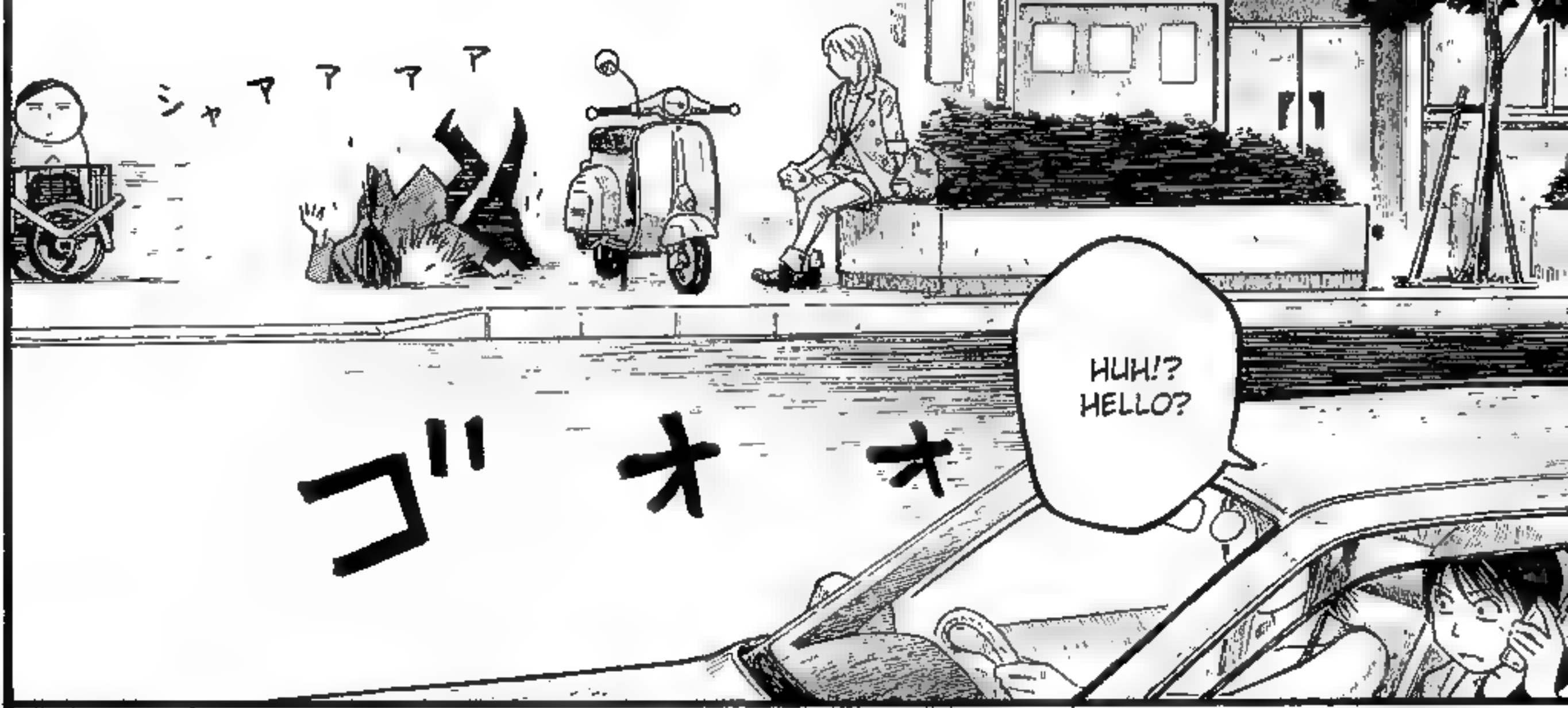
Kei Yuuki

He's been Sawaki's friend since they were kids and his parents run a sake brewery. I'm sure he'll play a big part next chapter.









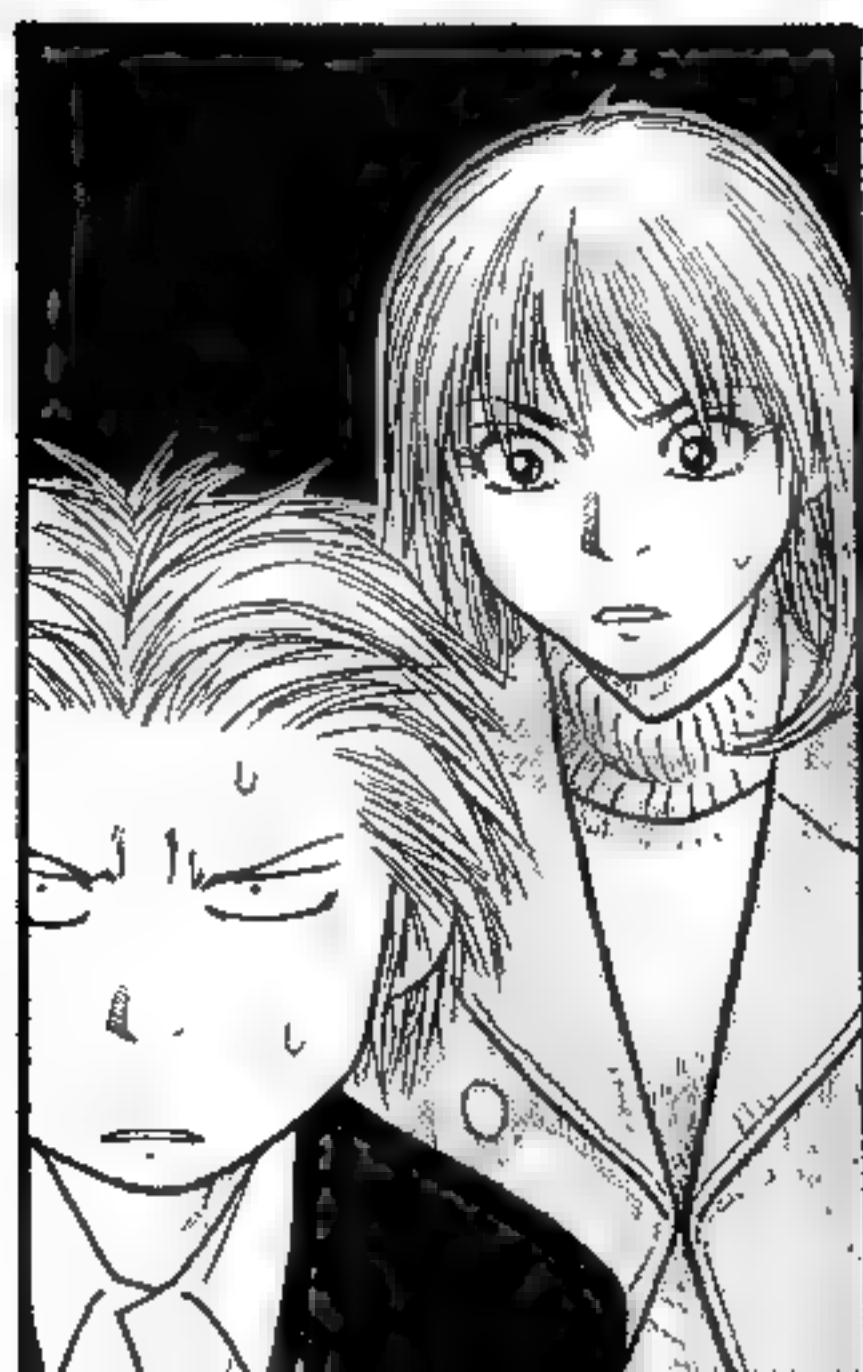
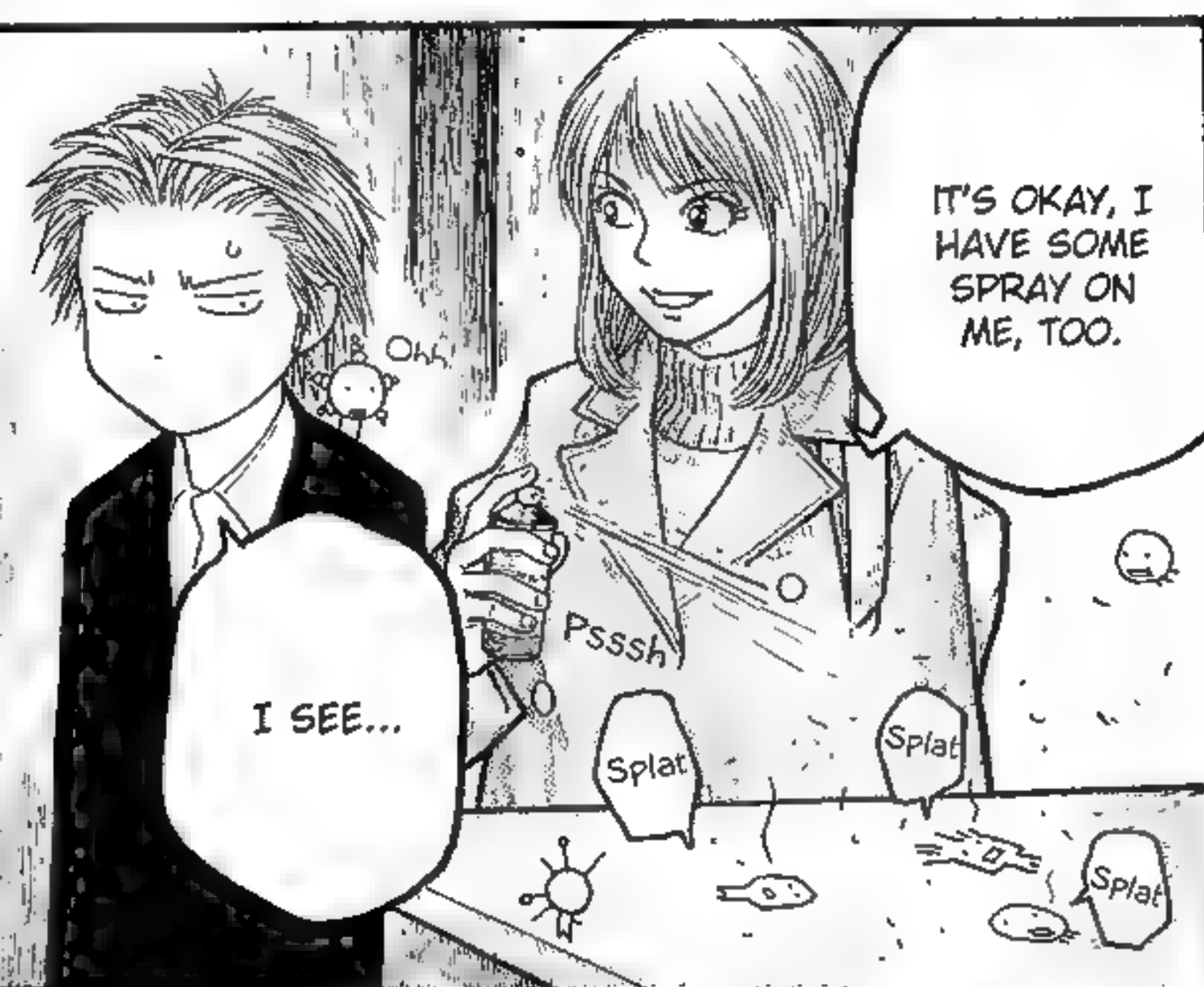
Hazuki Oikawa

Like Sawaki and Yuuki, she's a first-year at the agricultural university. She doesn't know about Sawaki's ability



Kaoru Misato

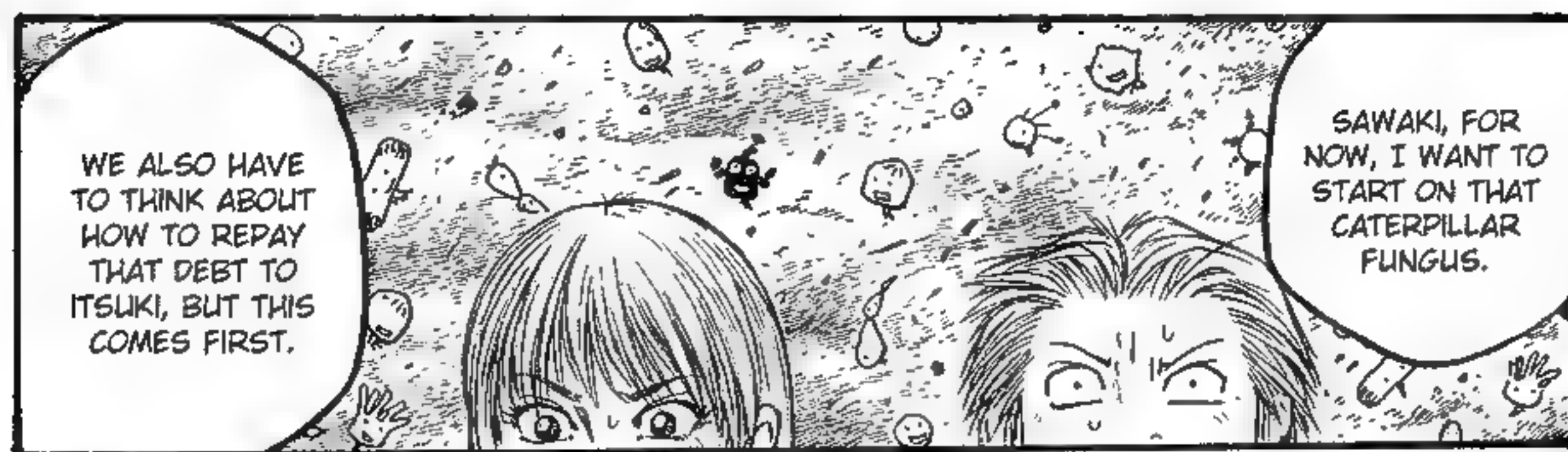
He's a second-year. He failed at homebrewing sake and now he has a large debt. He relies on Sawaki's ability



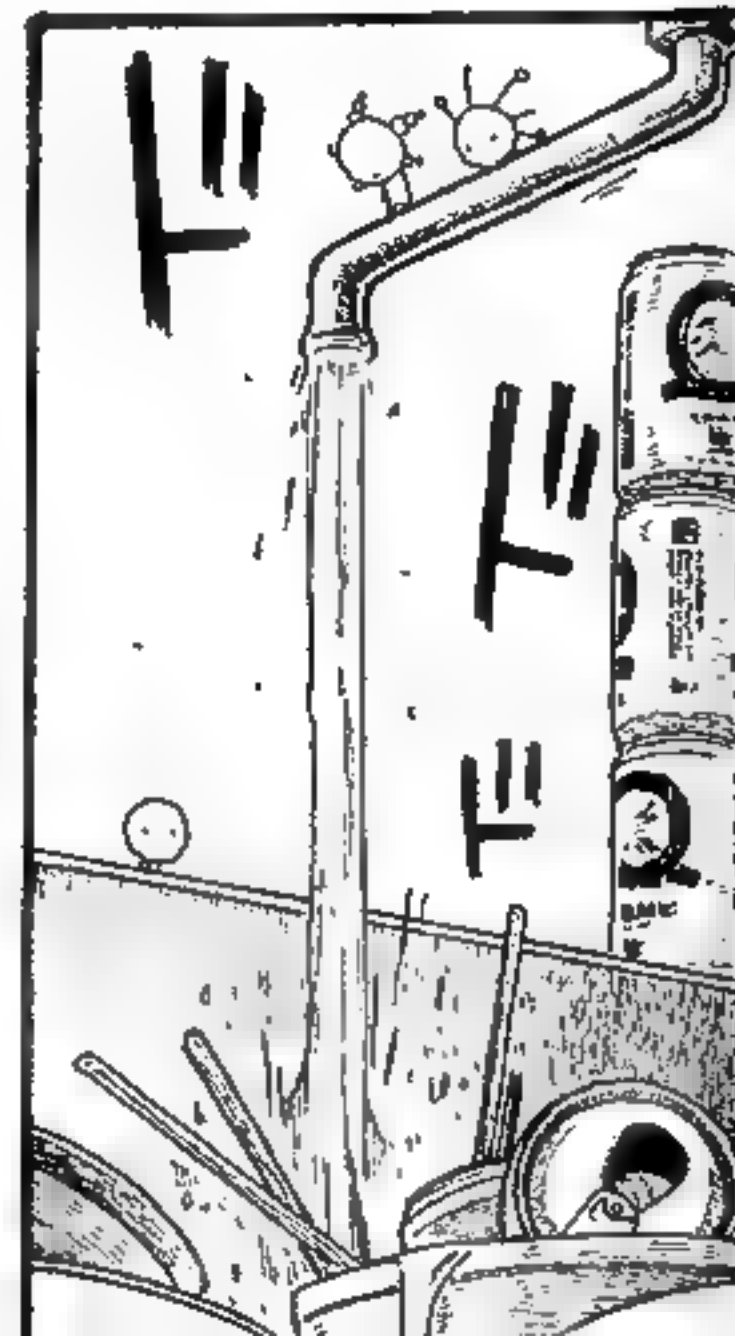


P.
fluorescens
This is a fluorescent bacteria. It's related to *P. aeruginosa* and makes milk glow green. It's part of the *Pseudomonas* genus.

P. vulgaris
It likes protein. It has a weakness for fish-paste products like *cnikuwa* and *kamaboko*.



C.
butyricum
This bacteria produces butyric acid. It likes pickled foods and is partial to Japanese cuisine.



B. subtilis
Also known as hay bacteria, it likes starchy foods and fish.

E.
carotovora
Also known as soft rot bacteria, it's a vegetarian and also likes fruit.

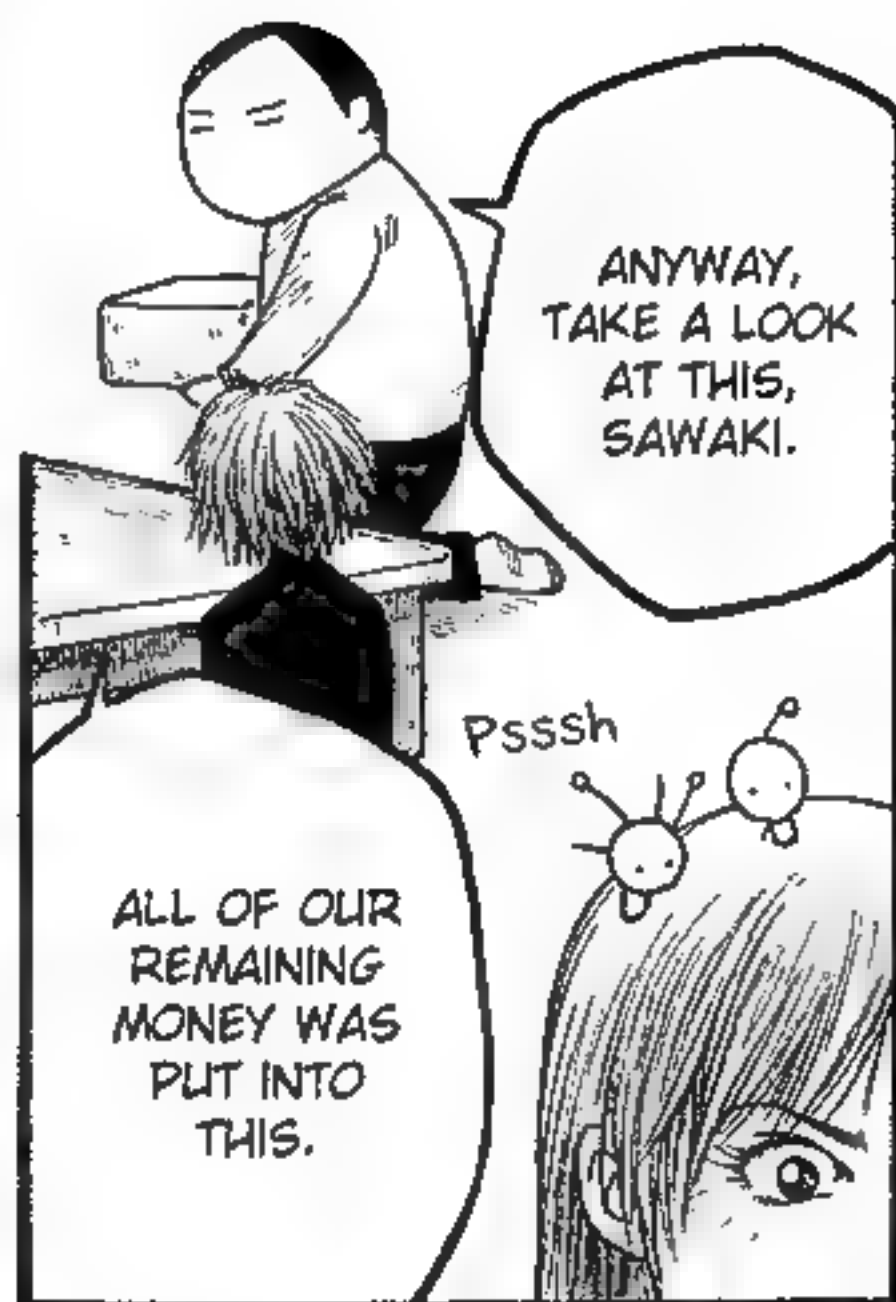


C. sinensis

It's also known as caterpillar fungus.

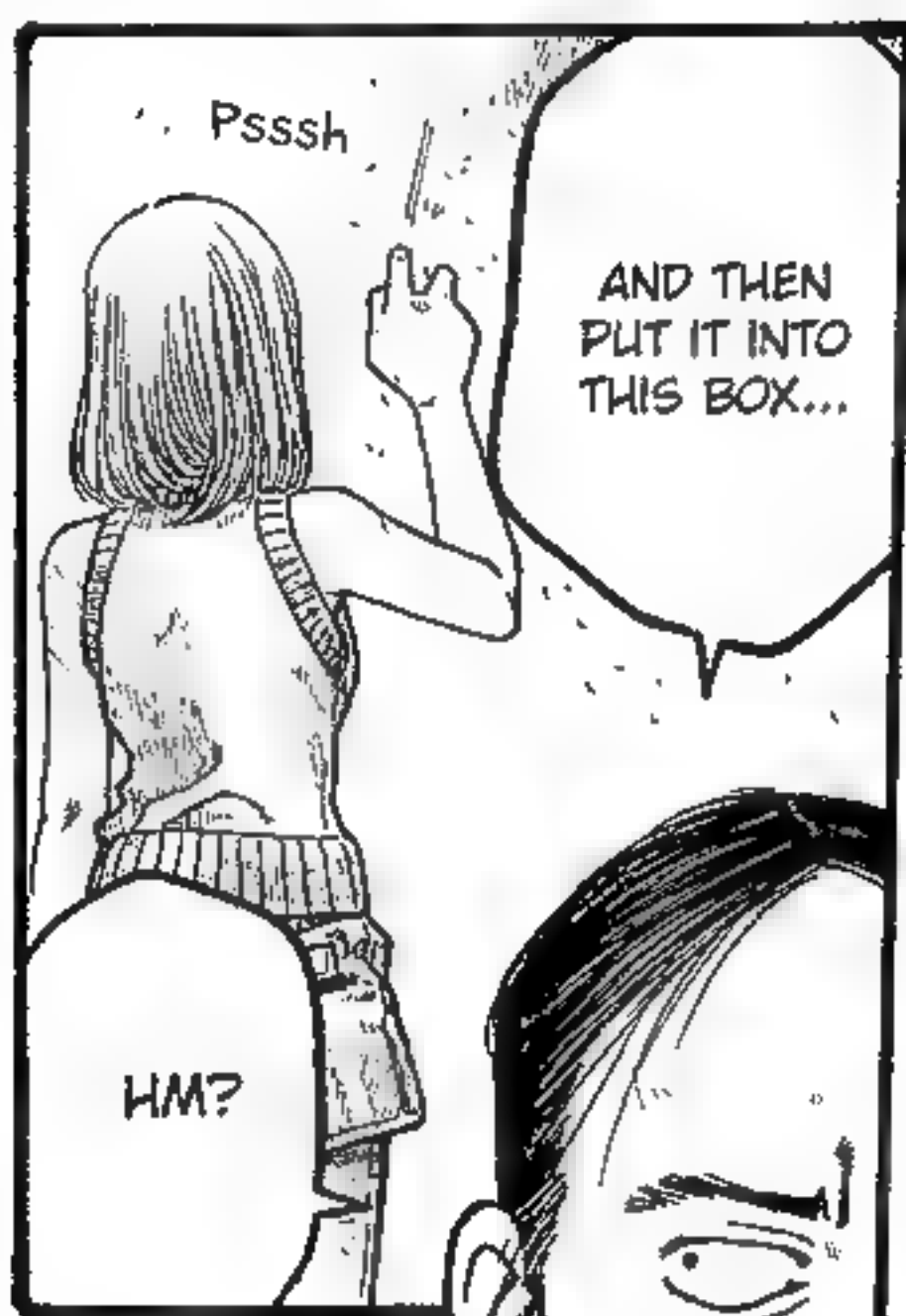
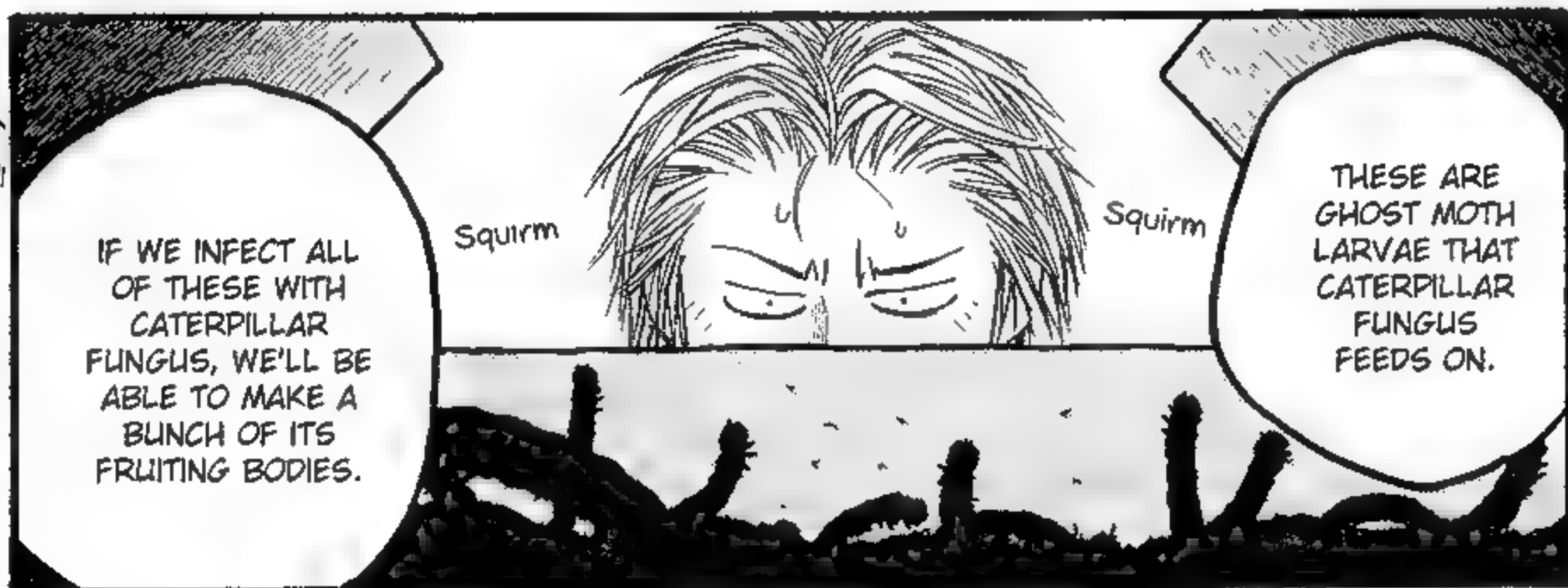
When it attaches itself to an insect, it turns it into an herb. The Ma Army made it famous.

Tl note: The Ma Army were the pupils of the Chinese track coach Ma Junren.



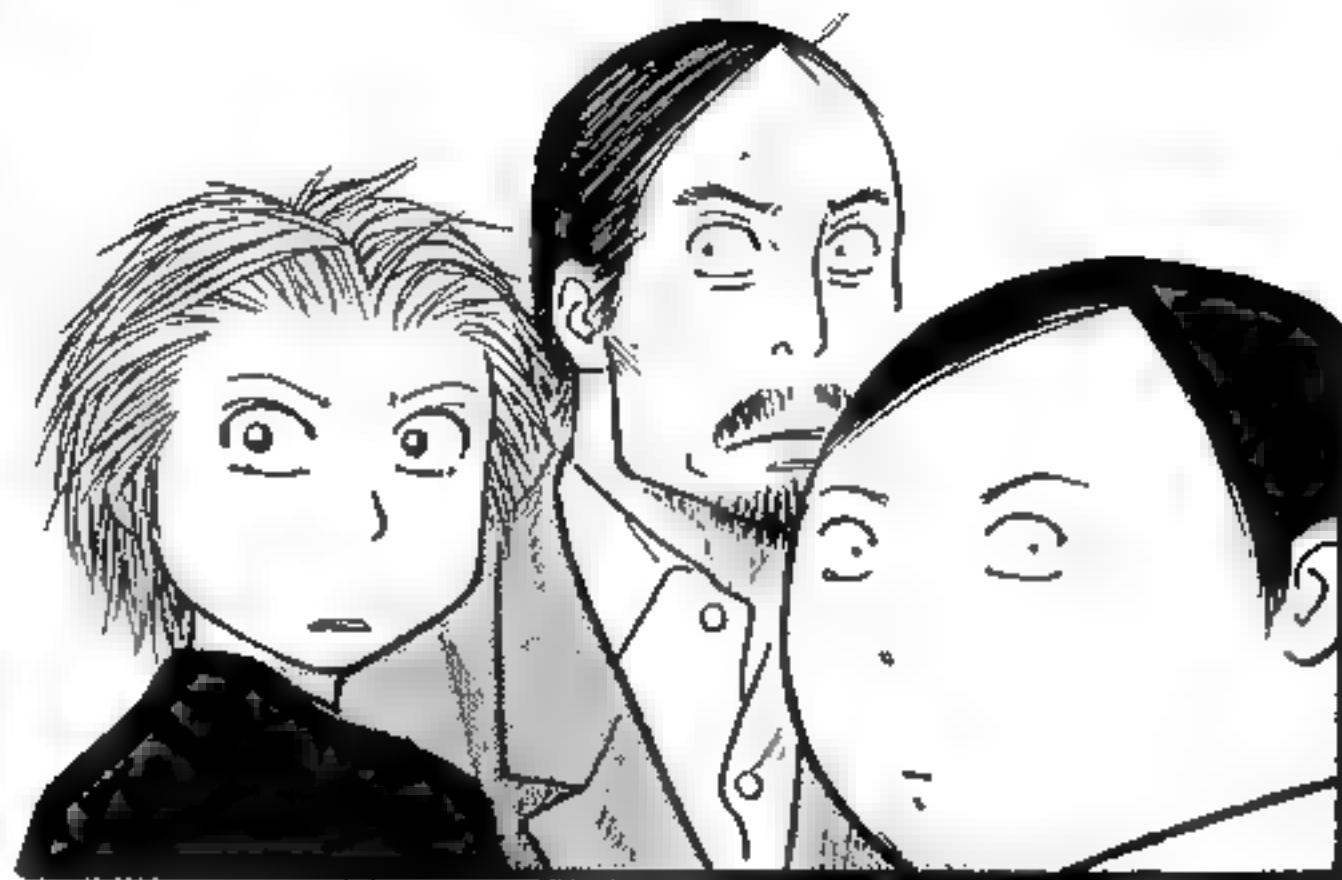
Takuma Kawahama

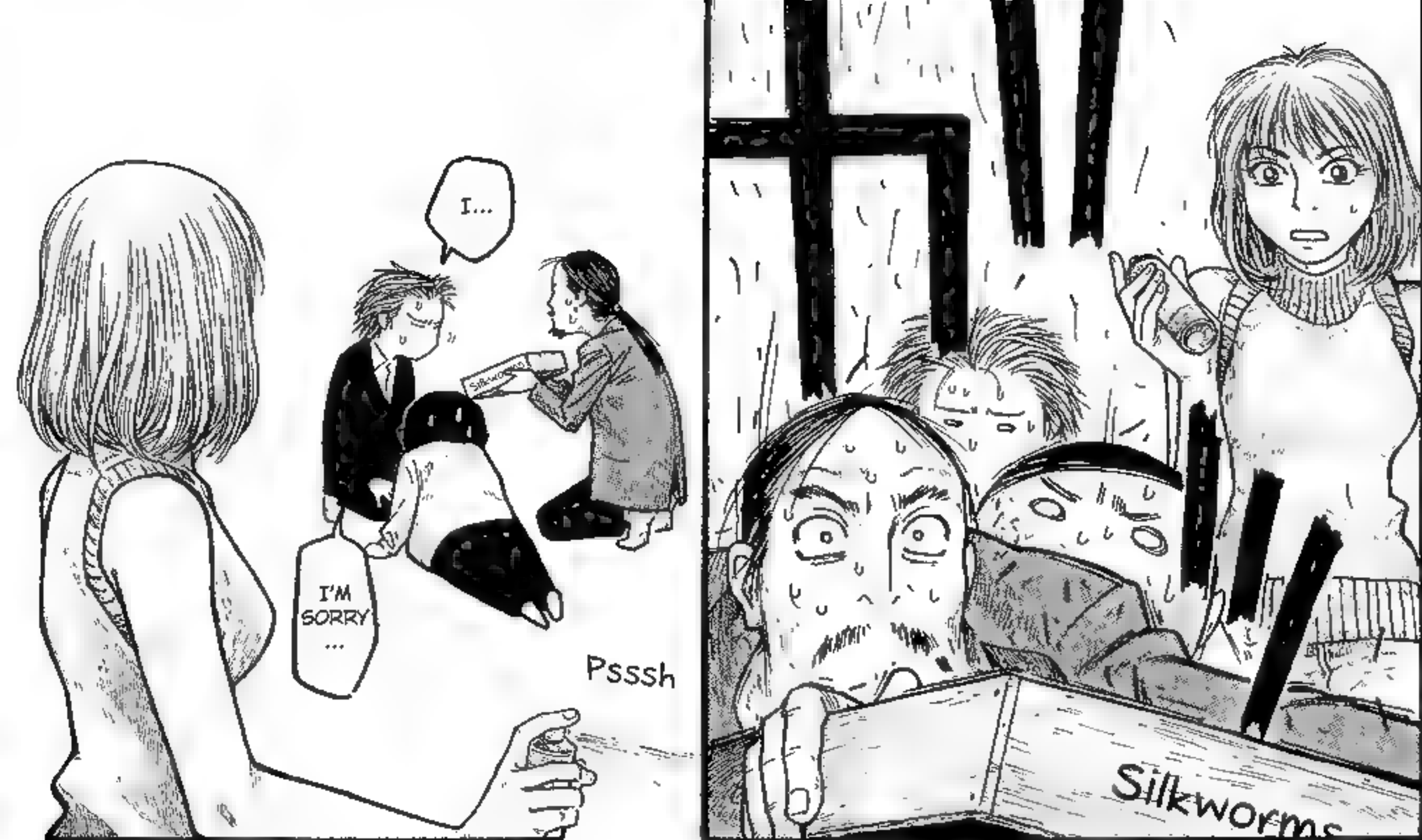
He's a second-year. He's in debt along with Misato. In this chapter, he showcases his trivial knowledge.

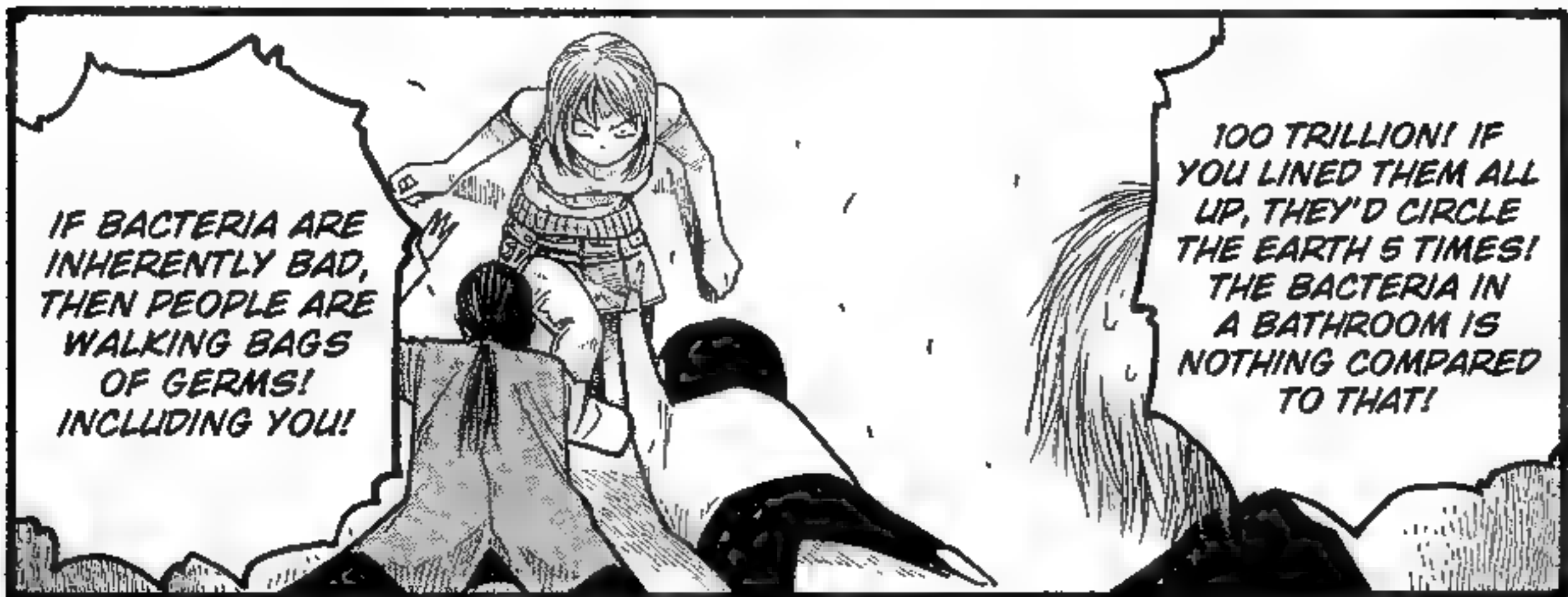




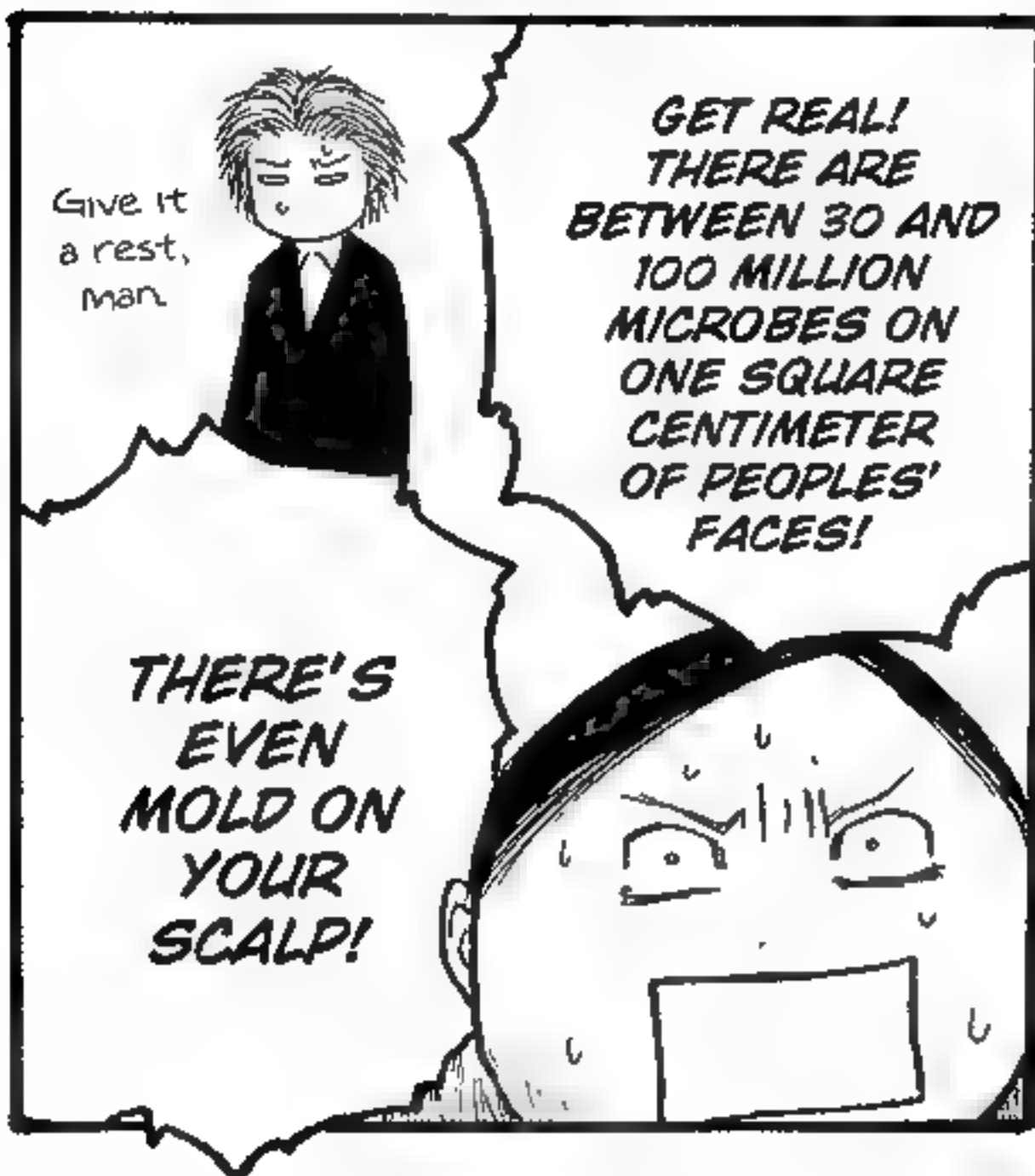
Psssssh







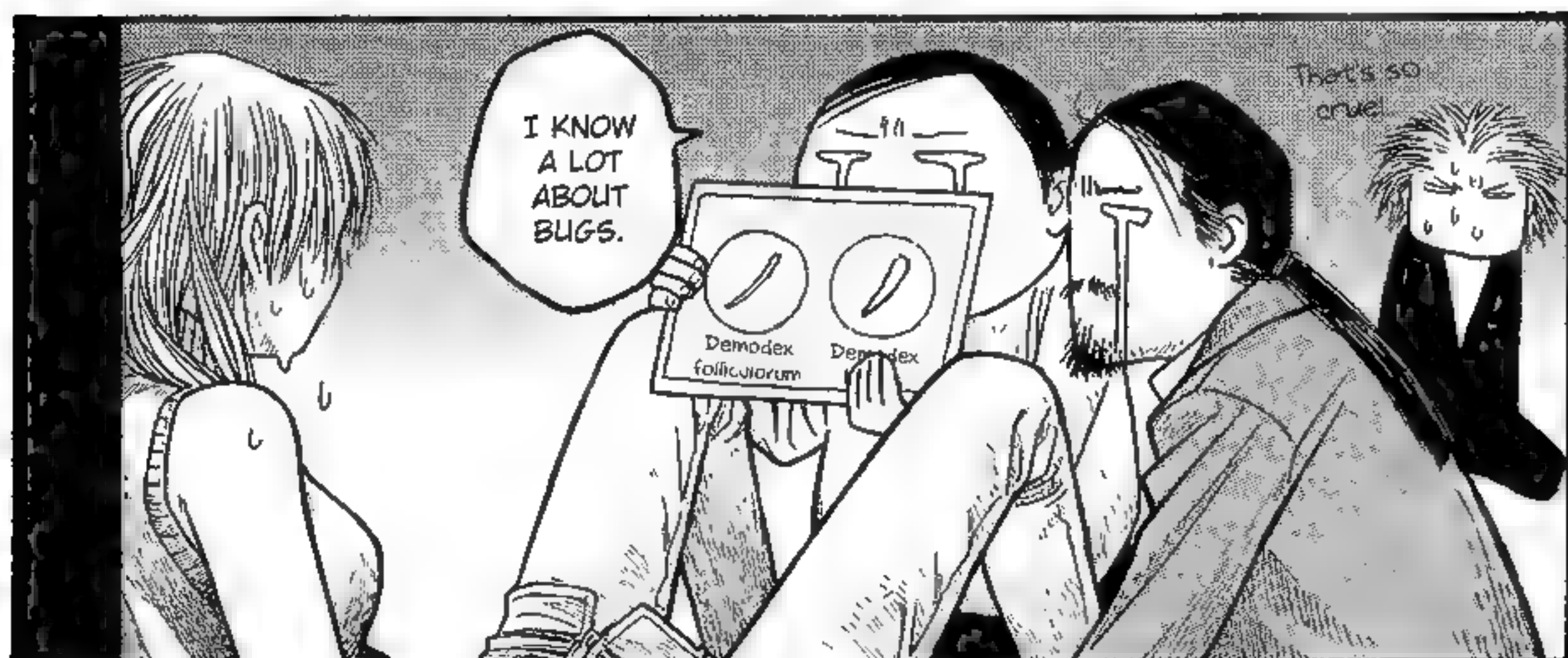
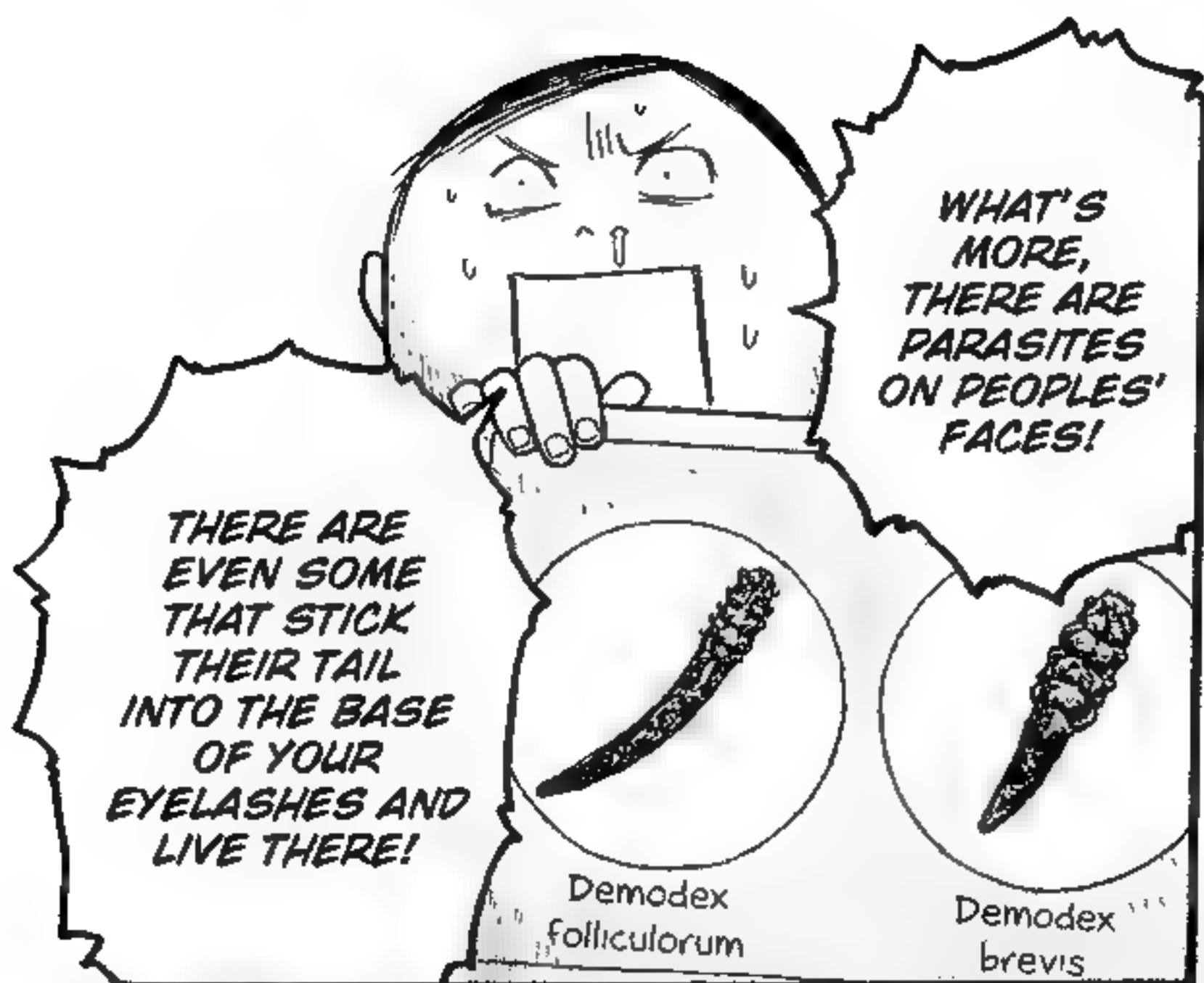
S
epidermidis
This is Staphylococcus that lives on your skin. It's all over your body. Don't let it bother you.

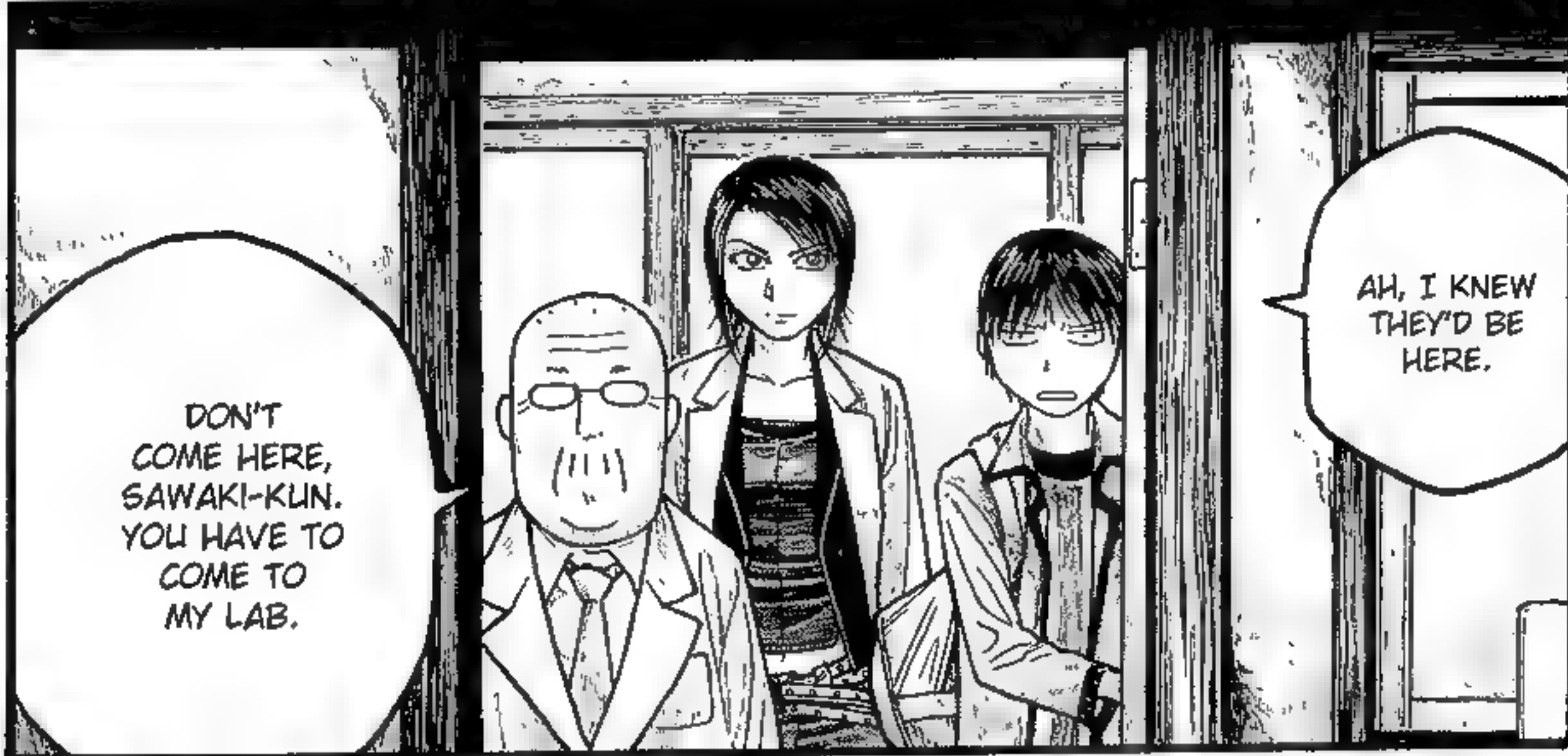


P. acnes
It causes acne. It's a member of the Propionibacterium genus.



M. furfur
It's one of the causes of dandruff. It also likes the fat on the tip of your nose.



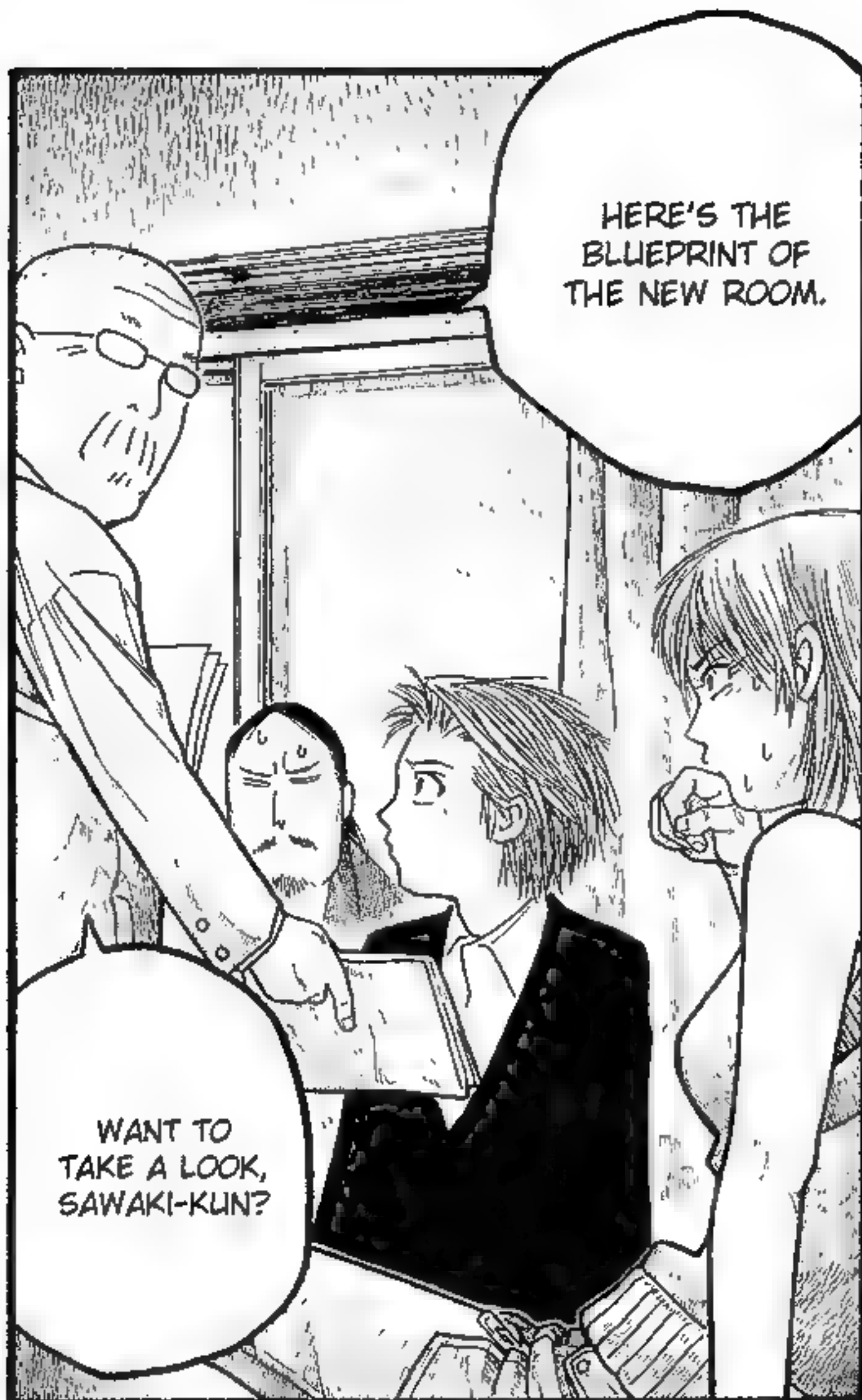


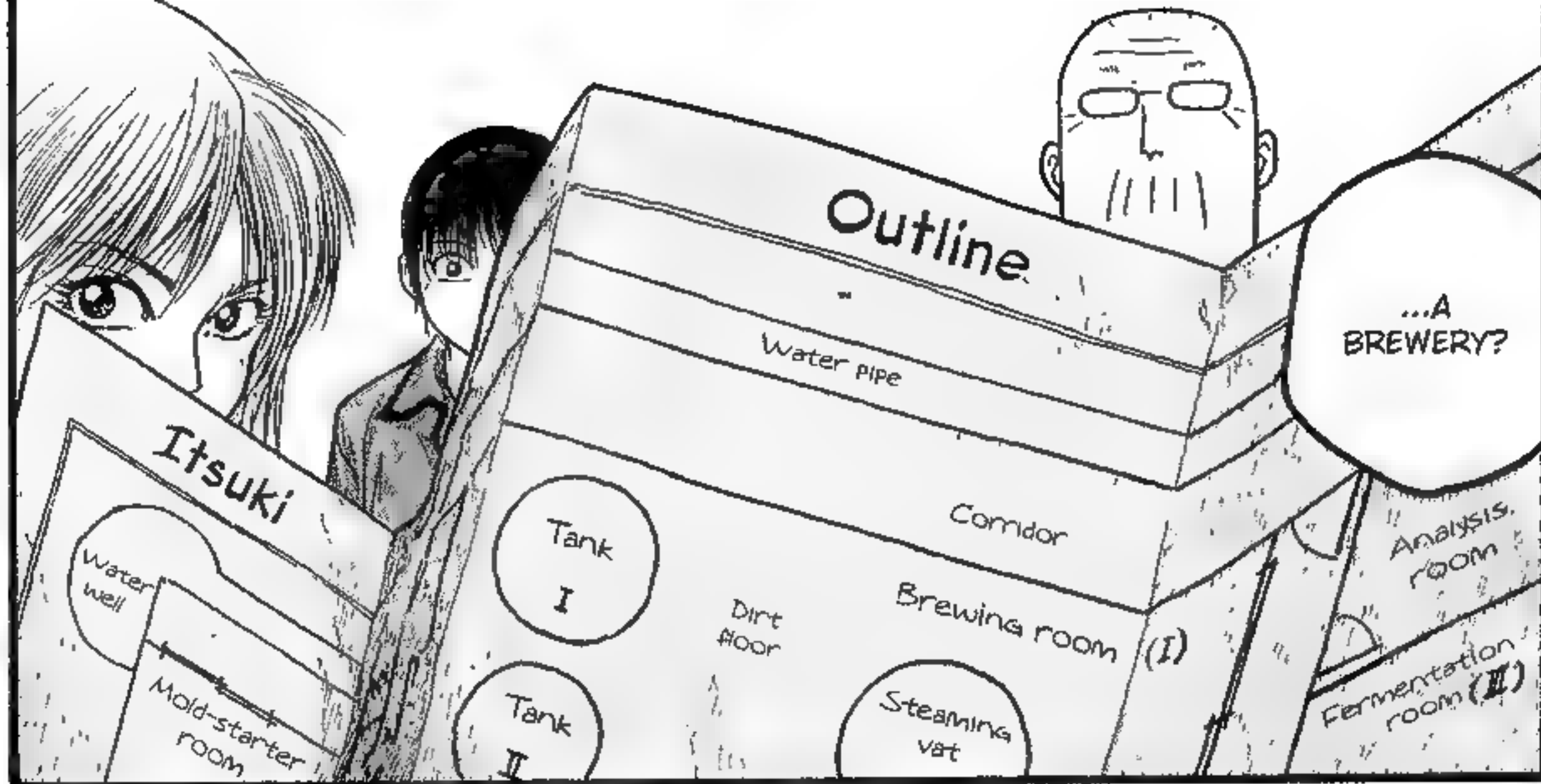
Keizou Itsuki
He's a professor at a certain agricultural university. If possible, he doesn't want others to find out about Sawaki's ability.



Haruka Hasegawa
She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She's really strong towards vulnerable people.







(Mental image)



They might finally start studying next time.

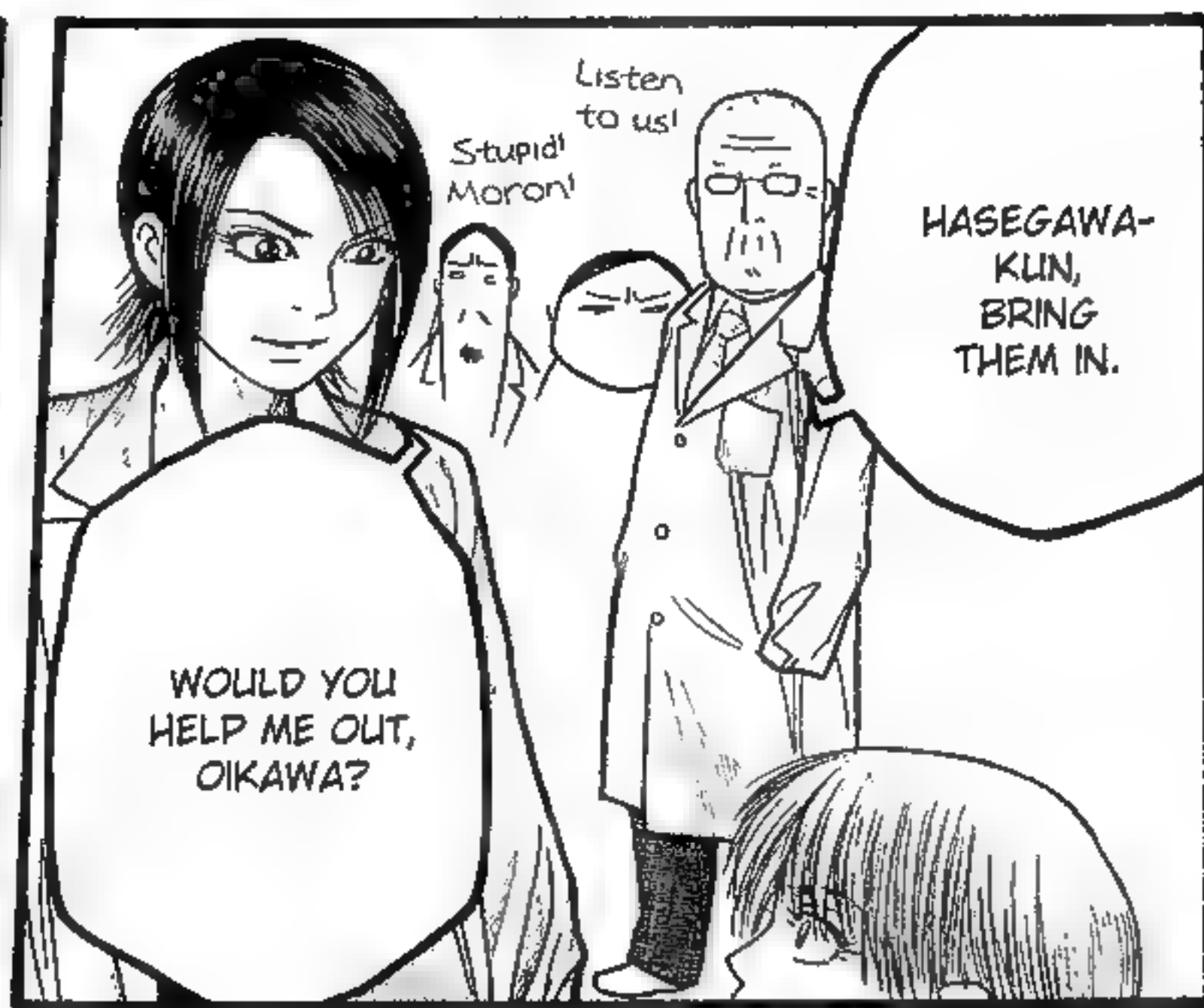
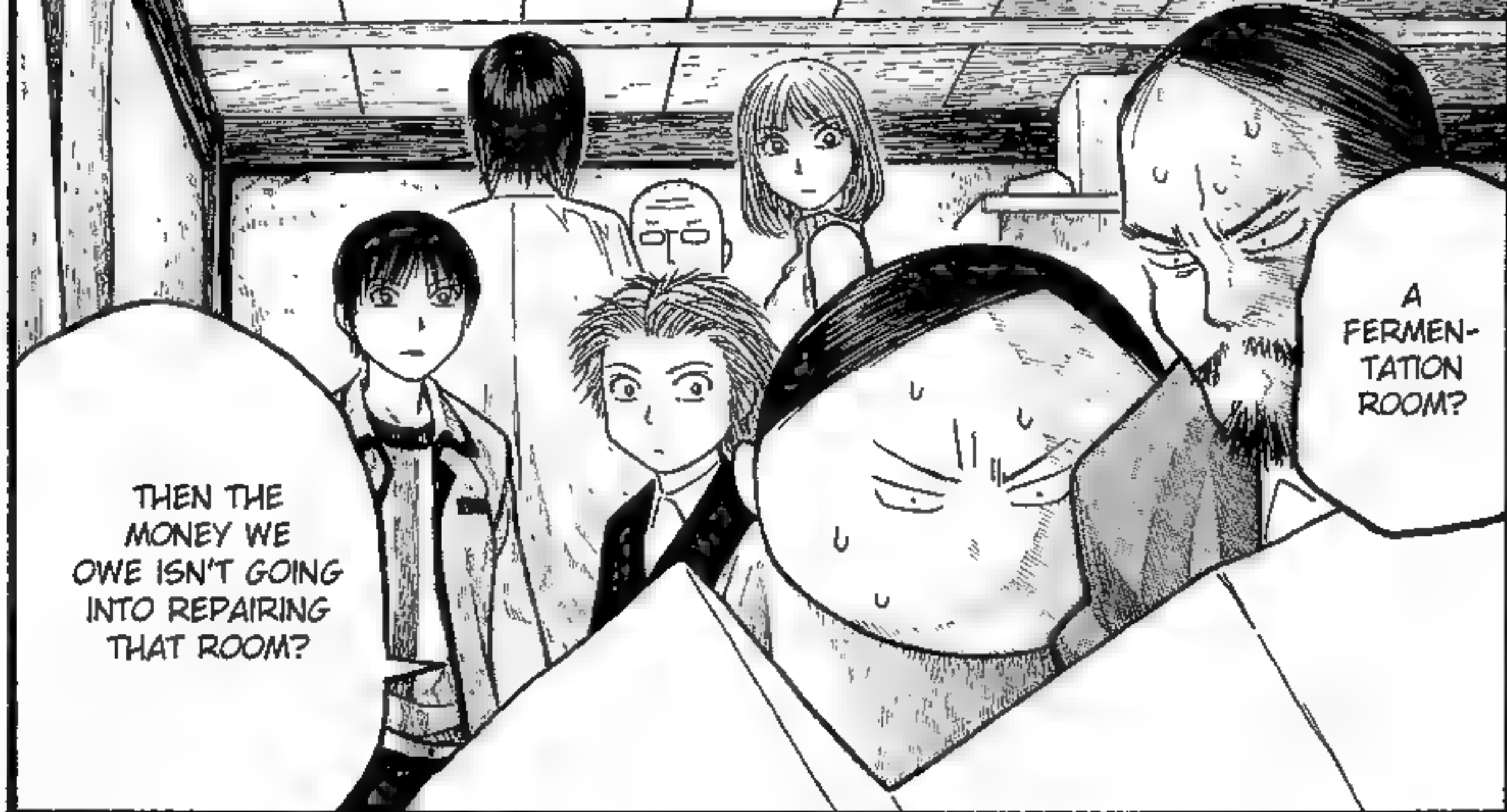


Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com

One part of chapter 9 is explosively popular (Does that sound weird?)



I'm so happy agricultural university students are fans of this.

お茶屋

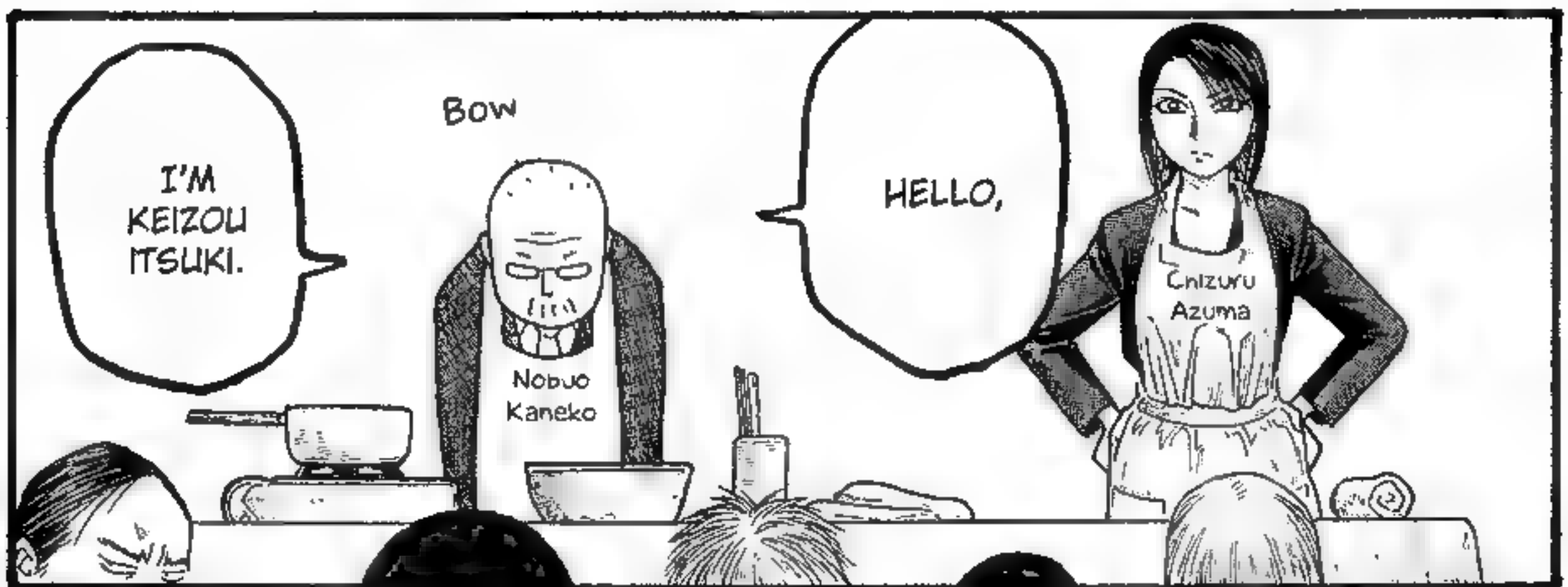
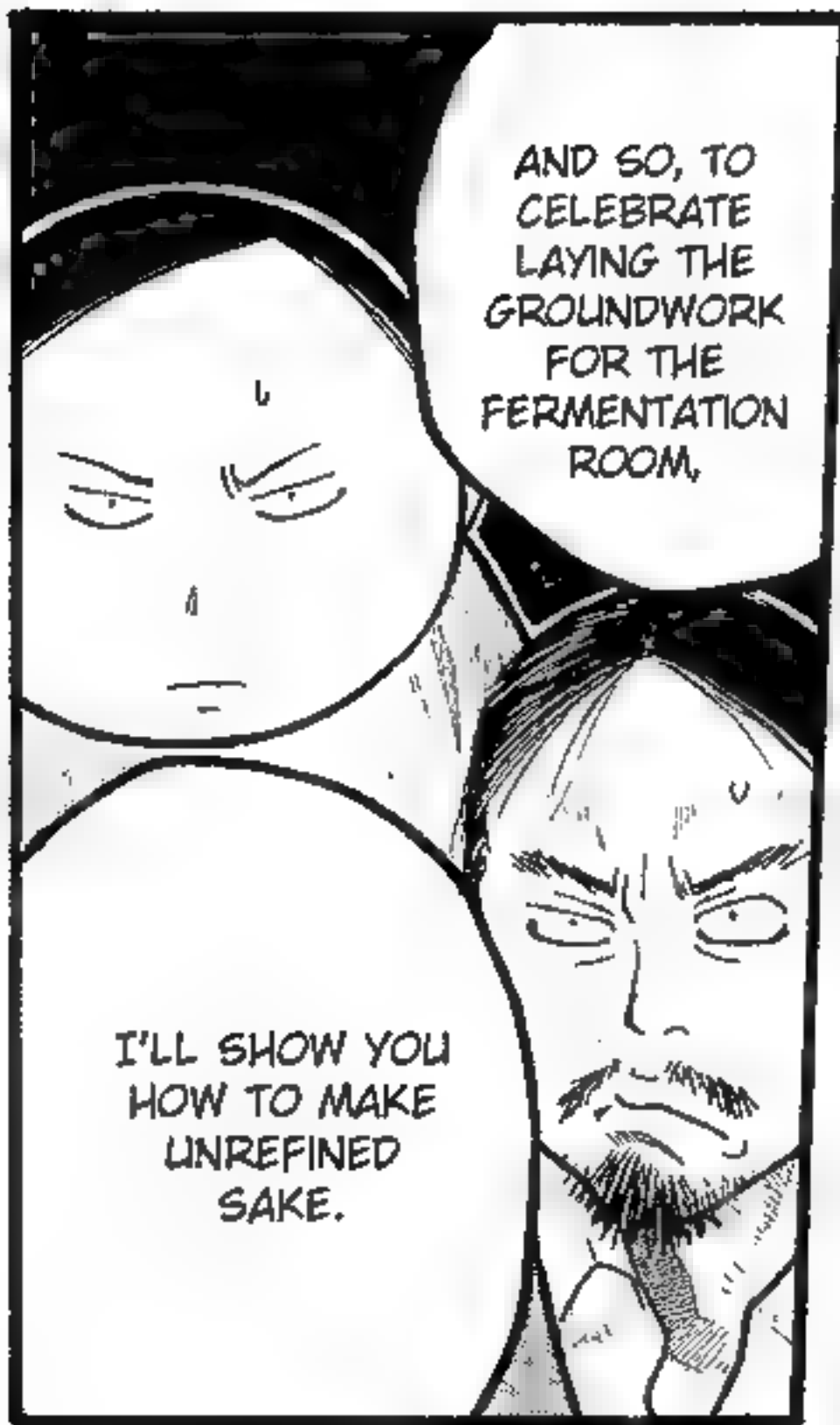


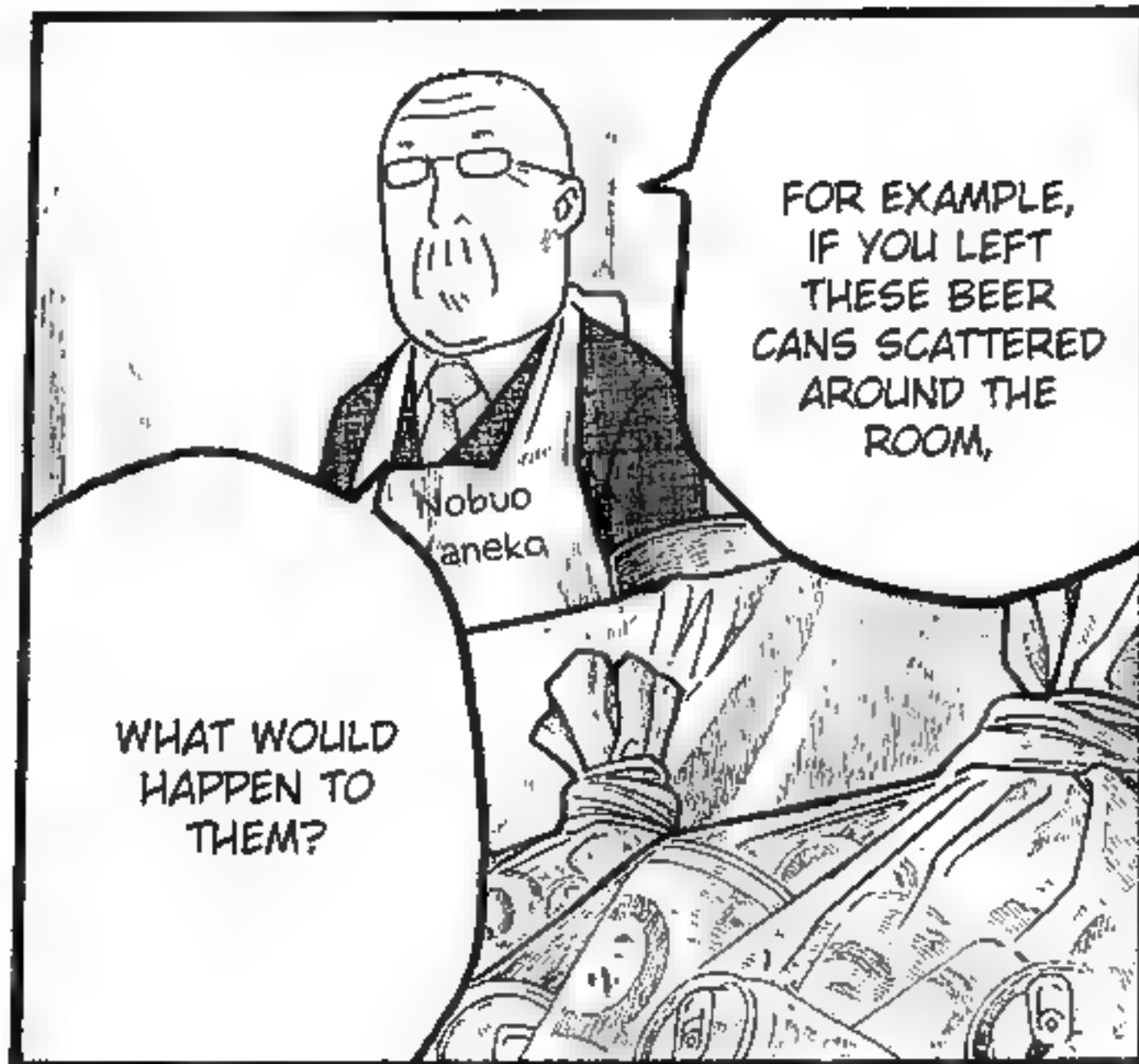
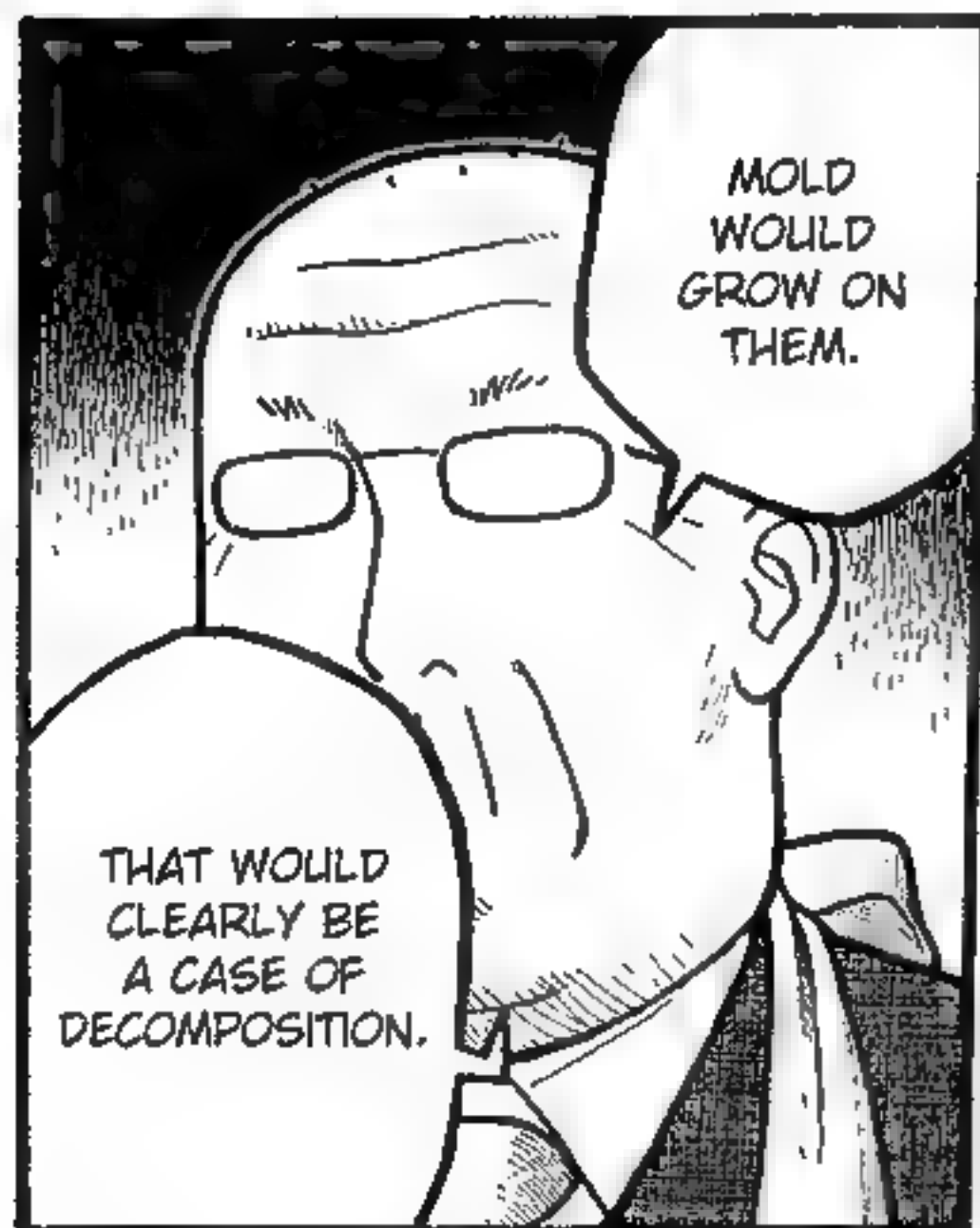
IT'S SO
CRAMPED
IN HERE!

HEY! DON'T
OPEN UP A
SHOP IN
SOMEONE'S
ROOM!

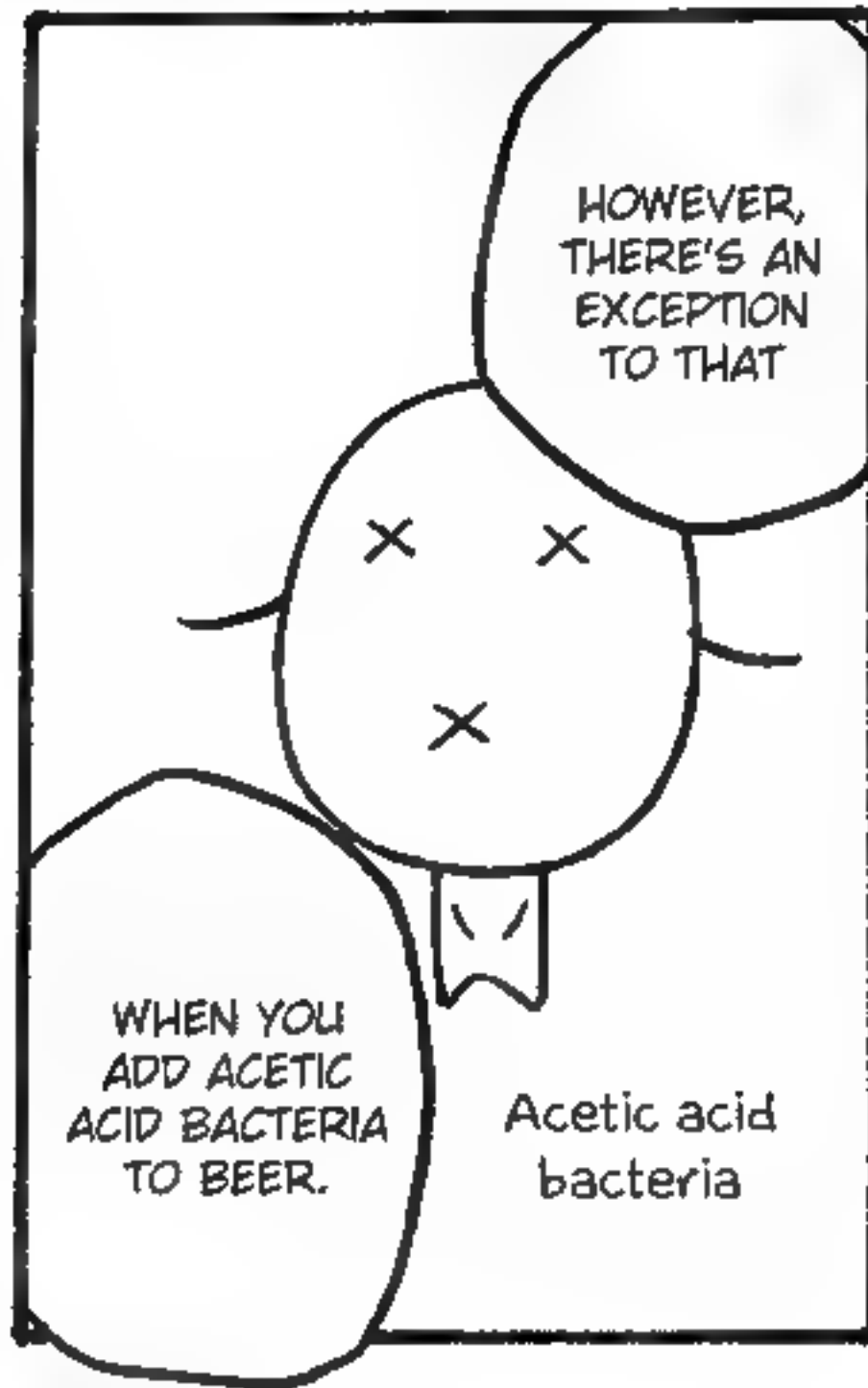
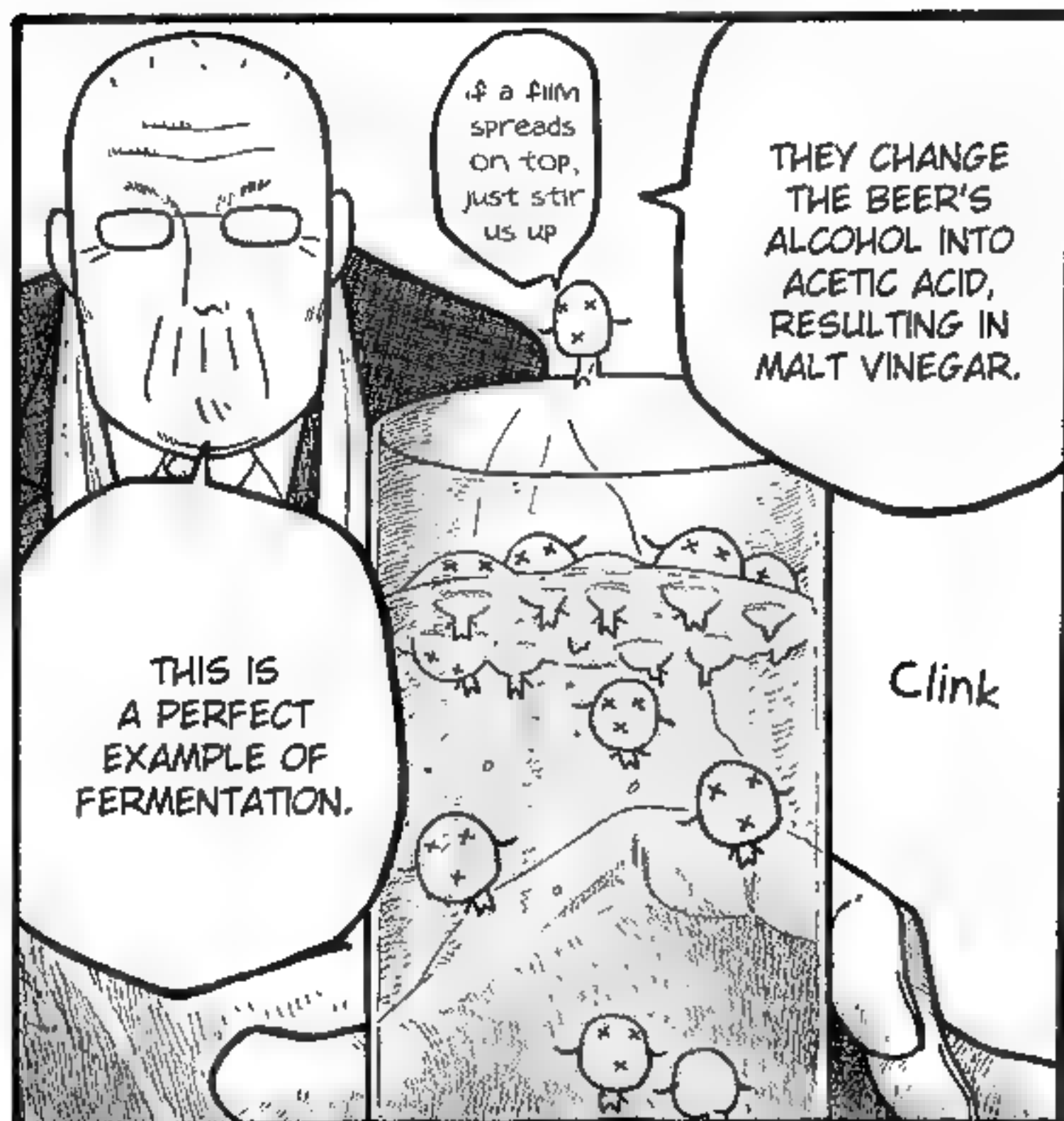


CH. 9: LET'S BREW

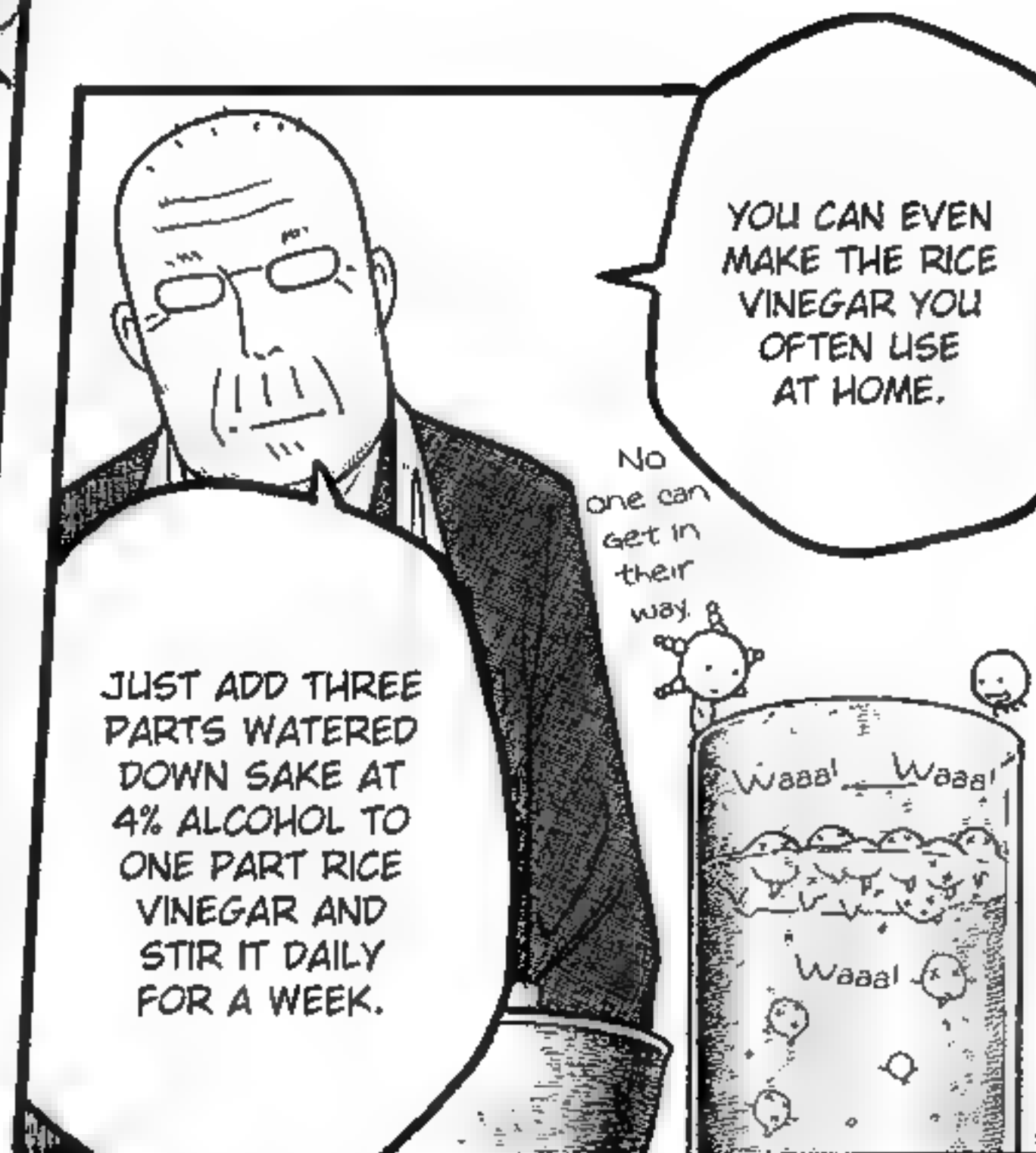
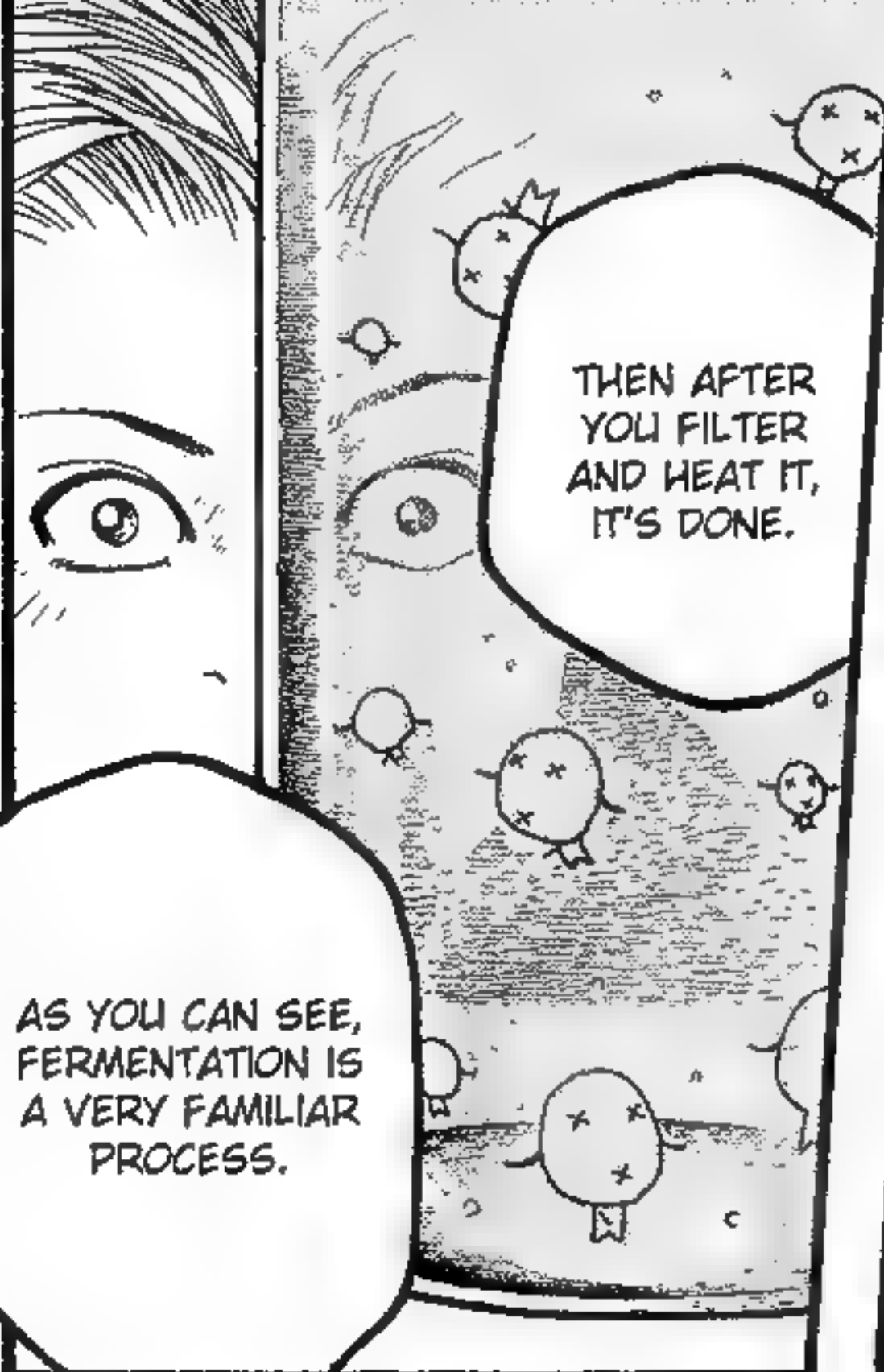


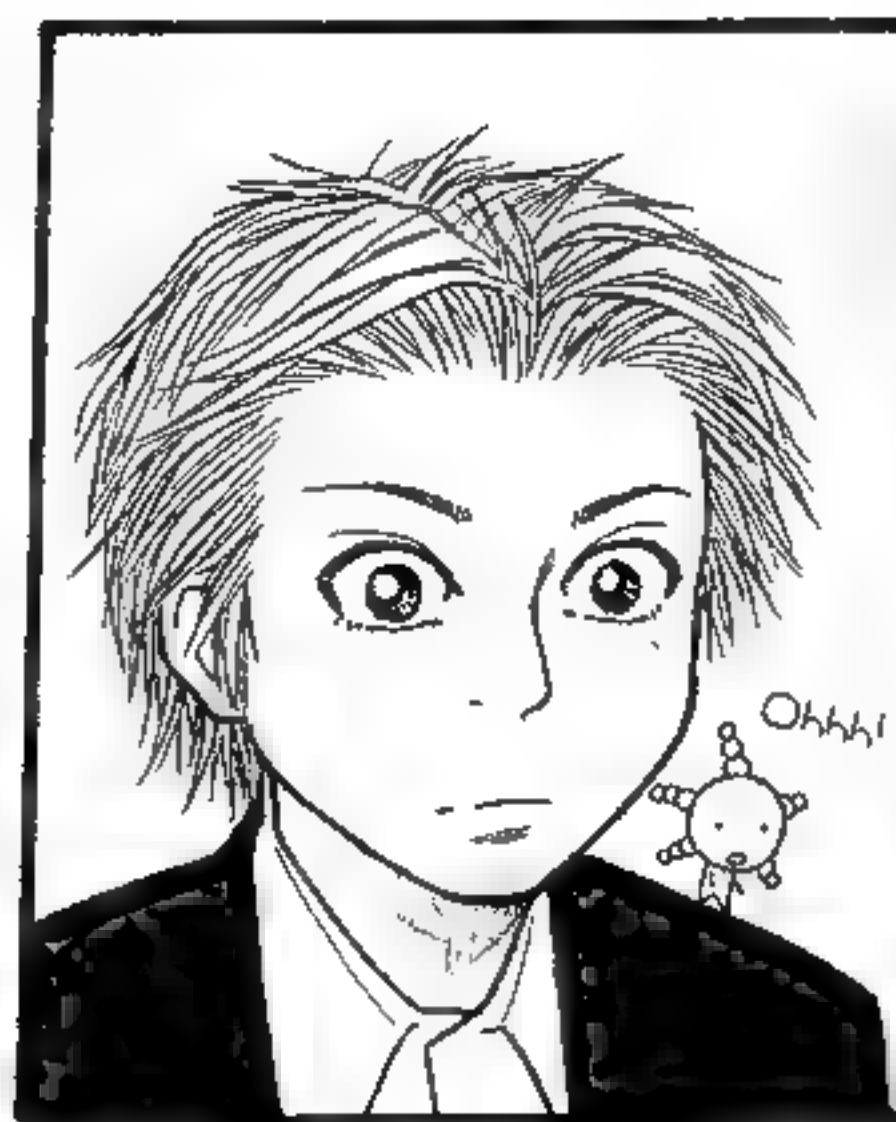


Tadayasu Sawaki
He's the main character. For some reason, he can see microbes. He was just restless last time.

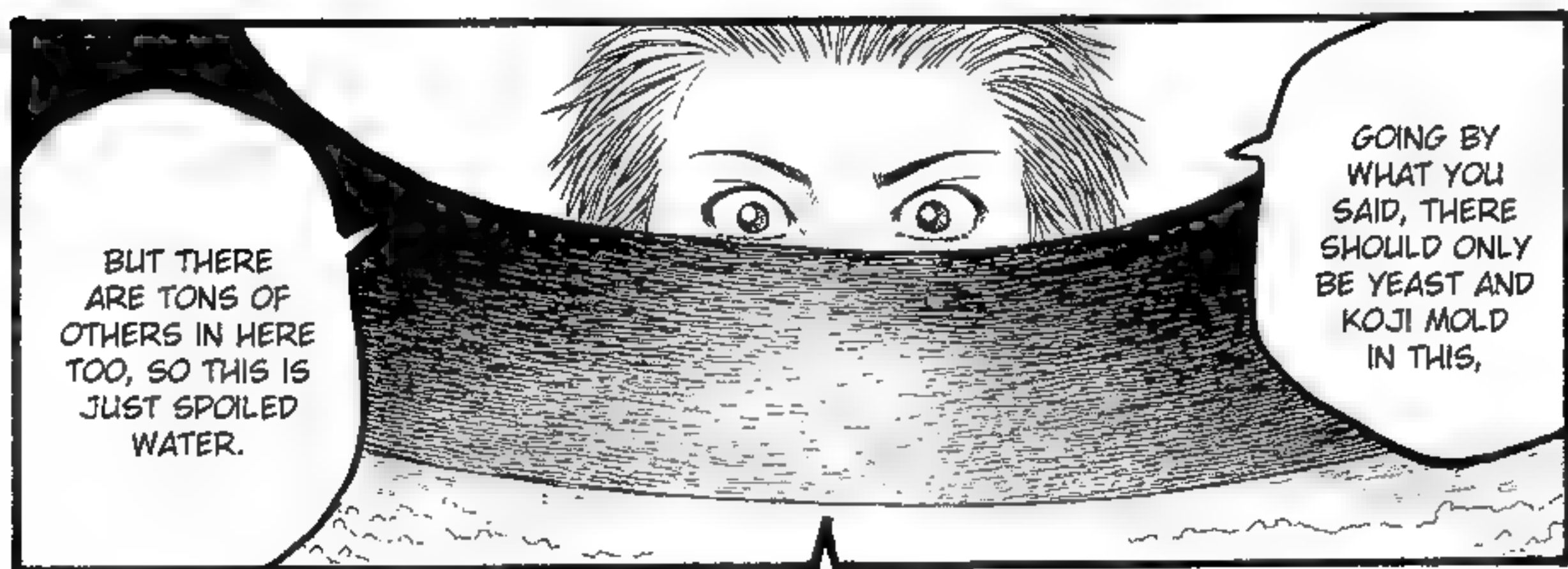


Kei Yuuki
He's been Sawaki's friend since they were kids and his parents run a sake brewery. He's in the middle of being the subordinate to graduate student Hasegawa.



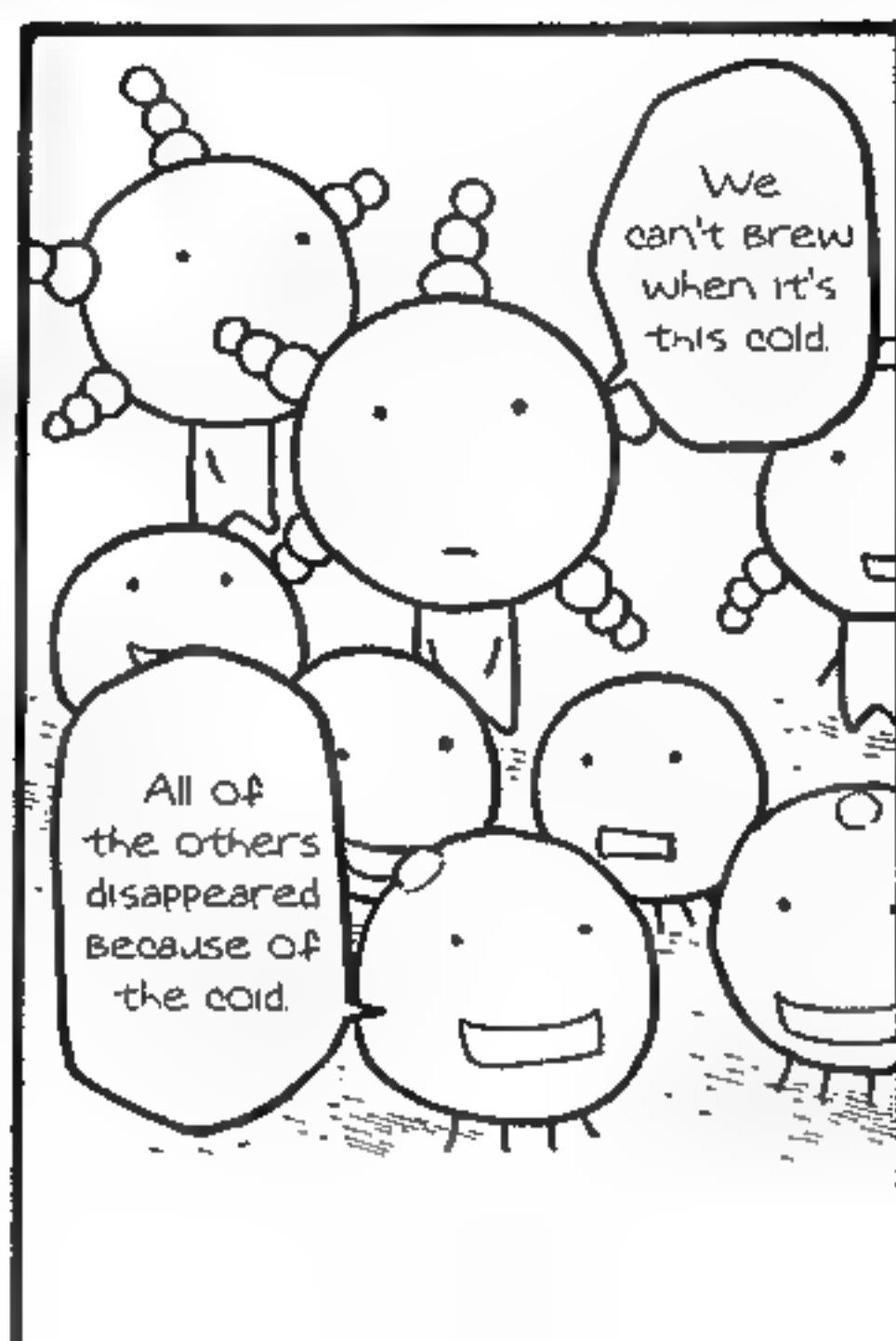
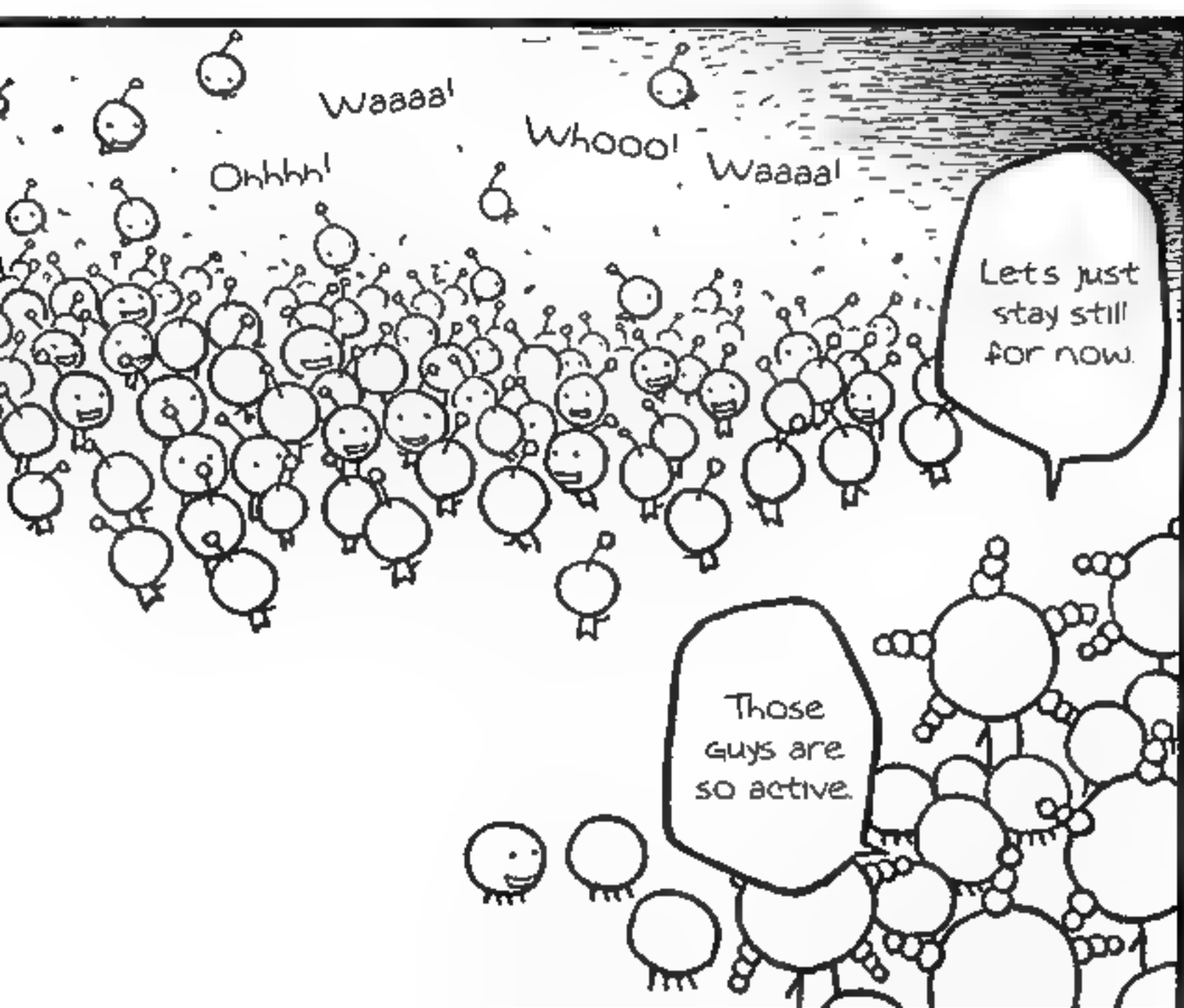
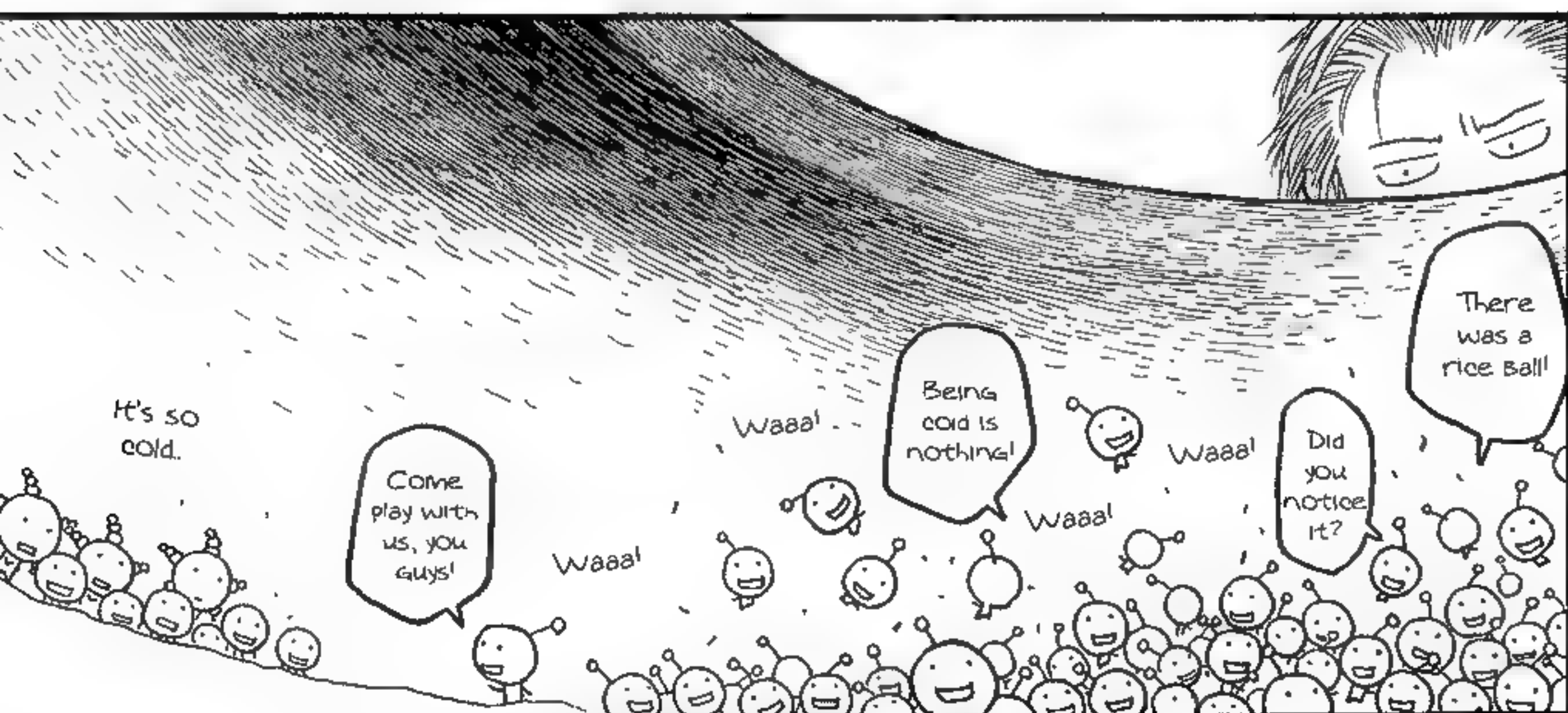
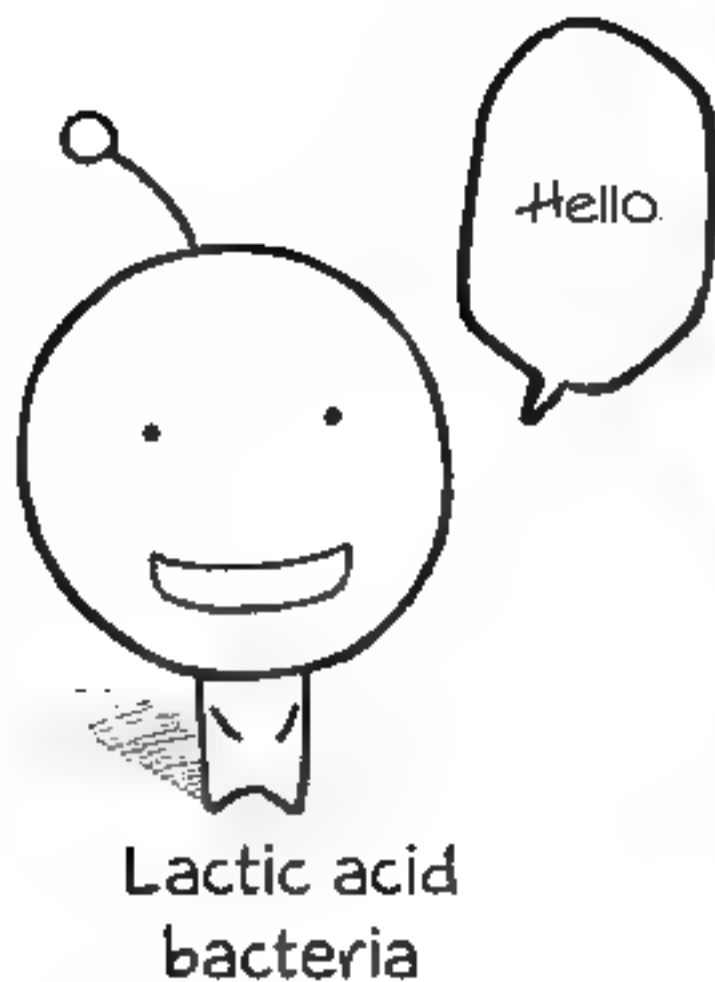


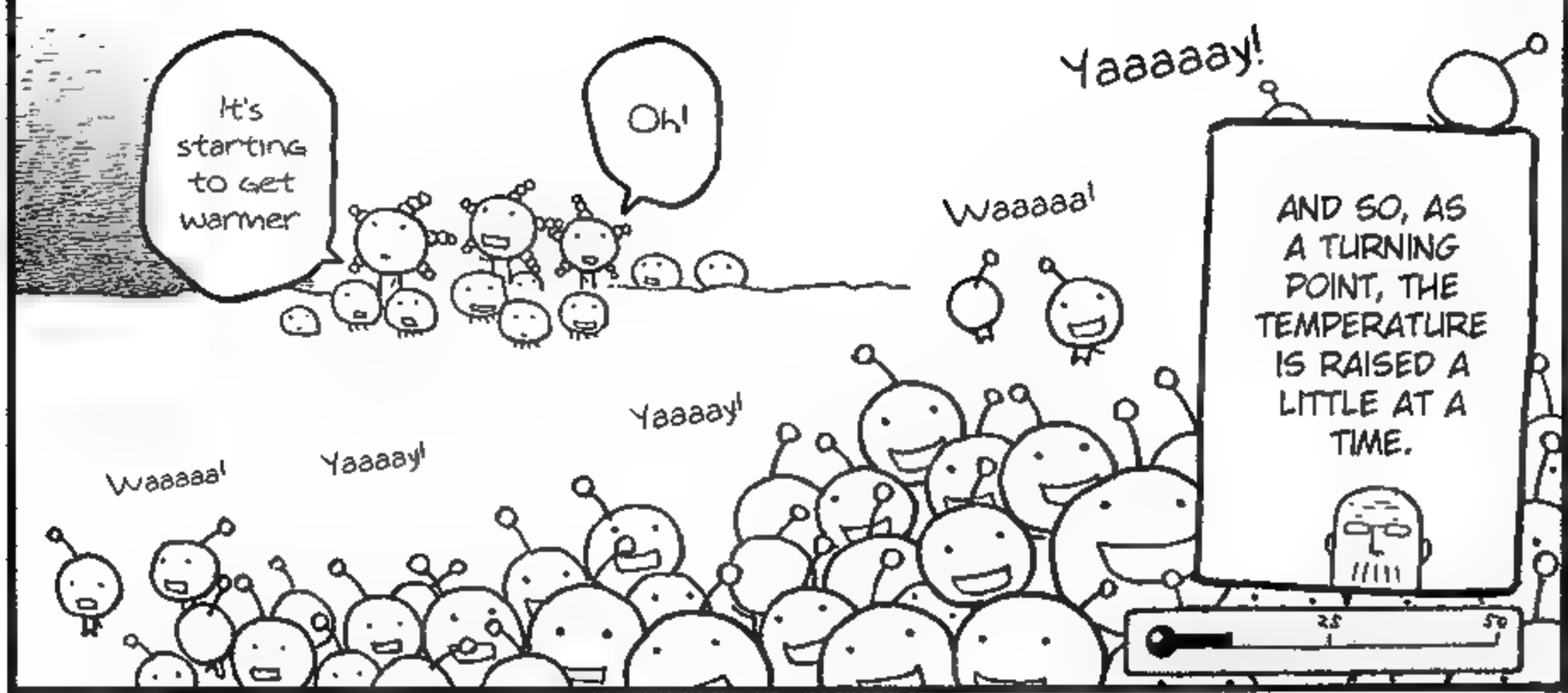
Hazuki O'kawa
Like Sawaki and Yuuki, she's a first-year at the agricultural university. She just happened to come along with Sawaki and the others.



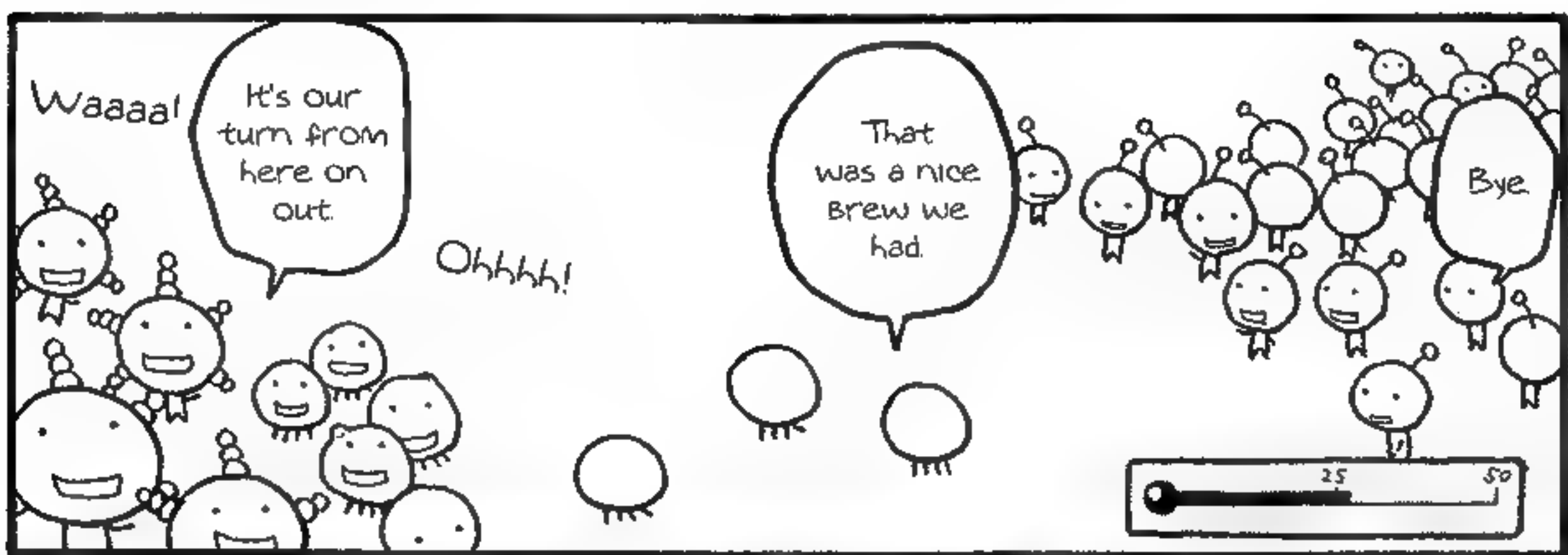
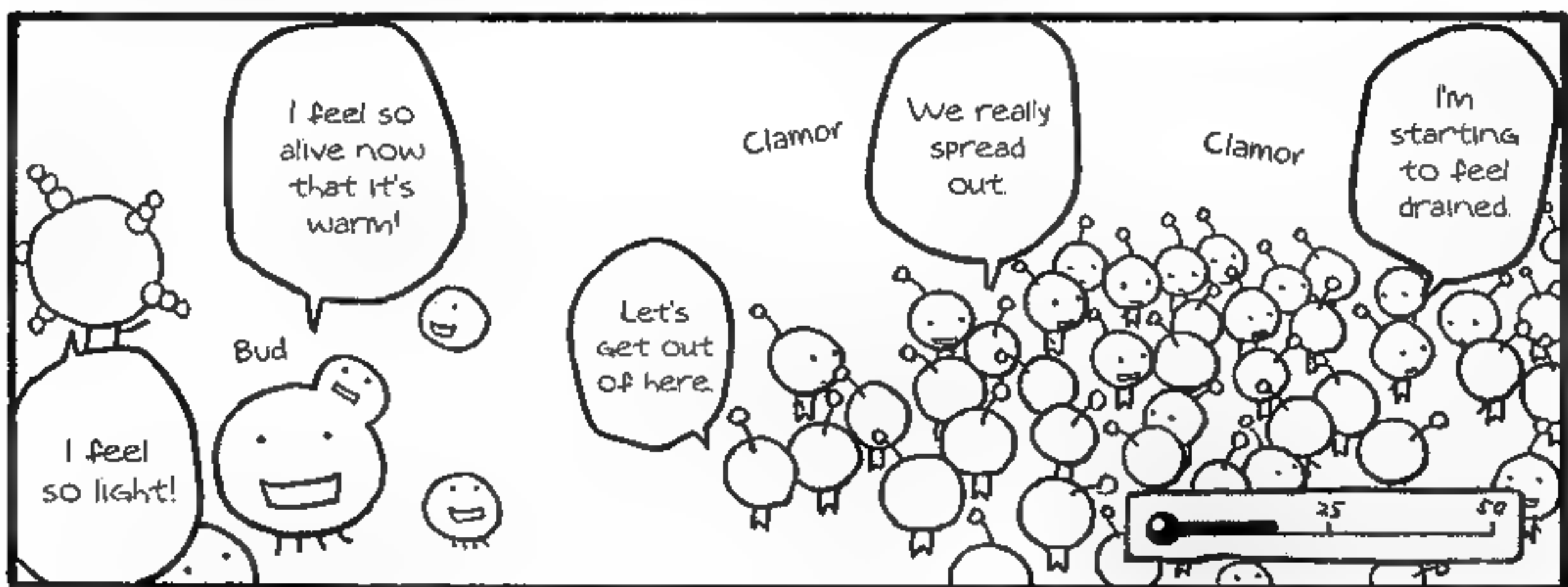
Kaoru M'sato
He's a second-year. He failed at home-brewing sake and now he has a large debt. But you'll be amazed!



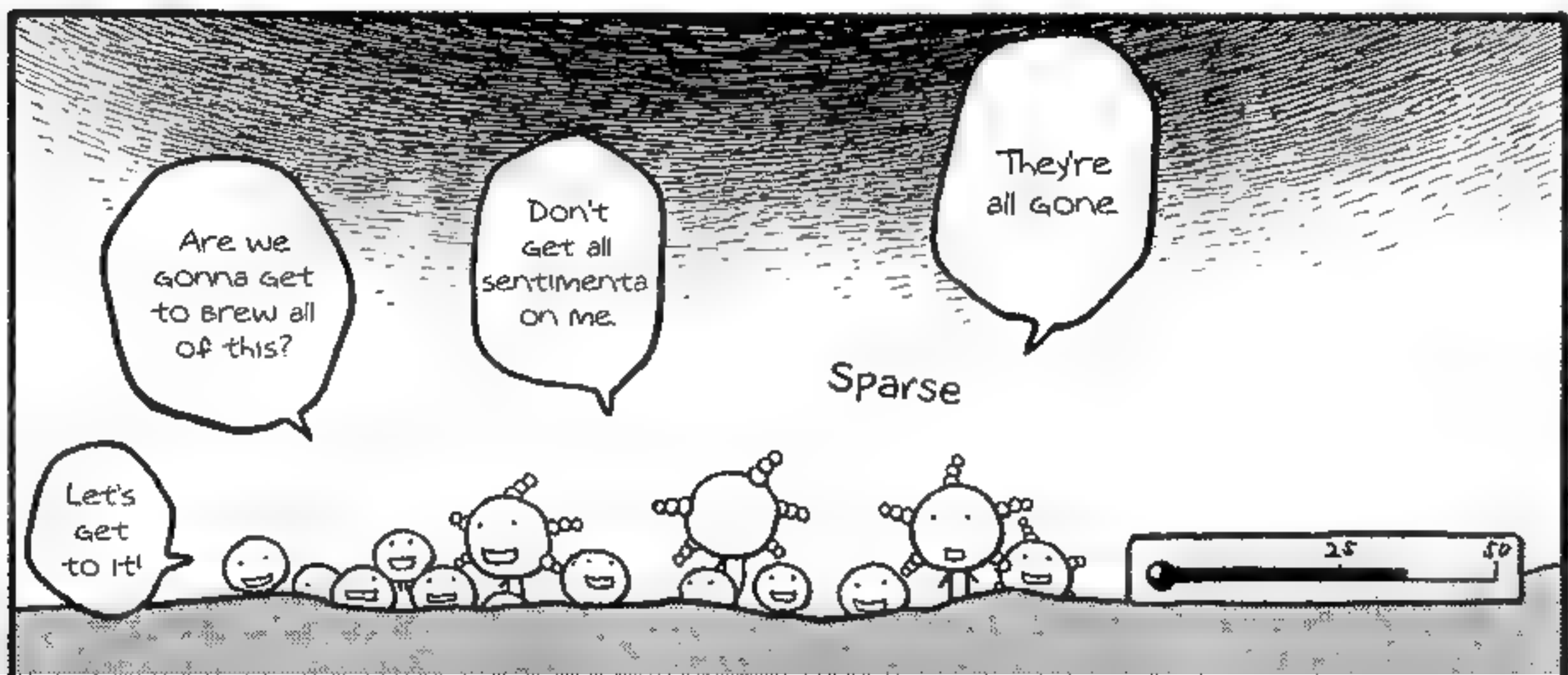




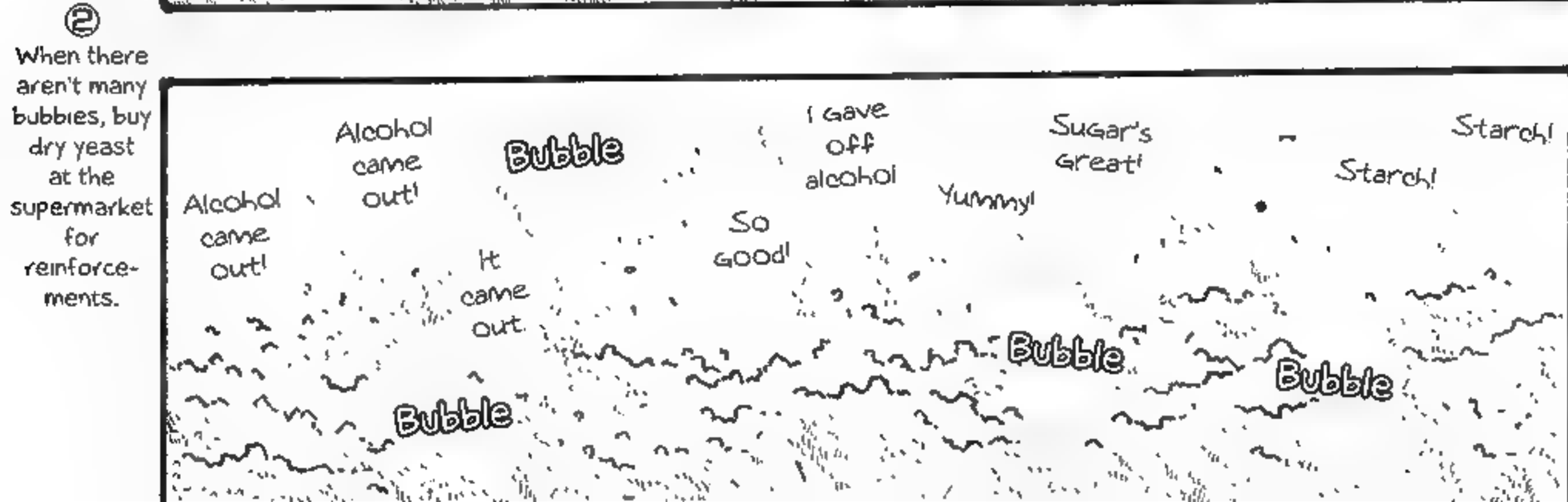
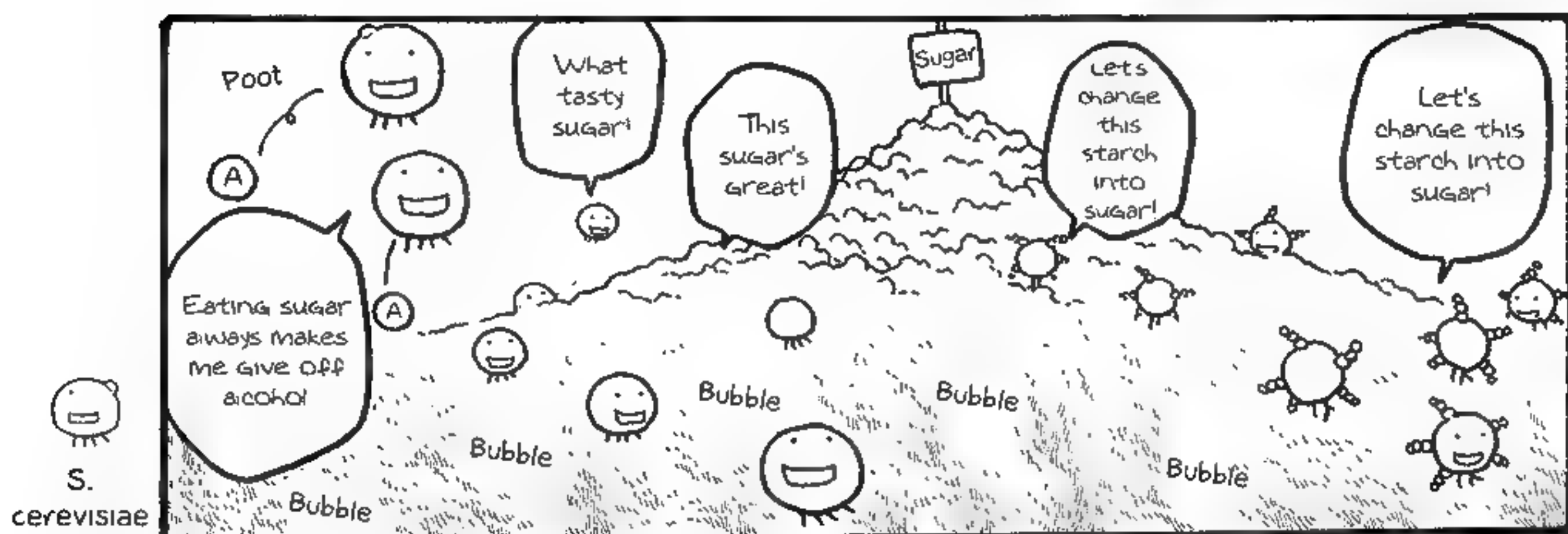
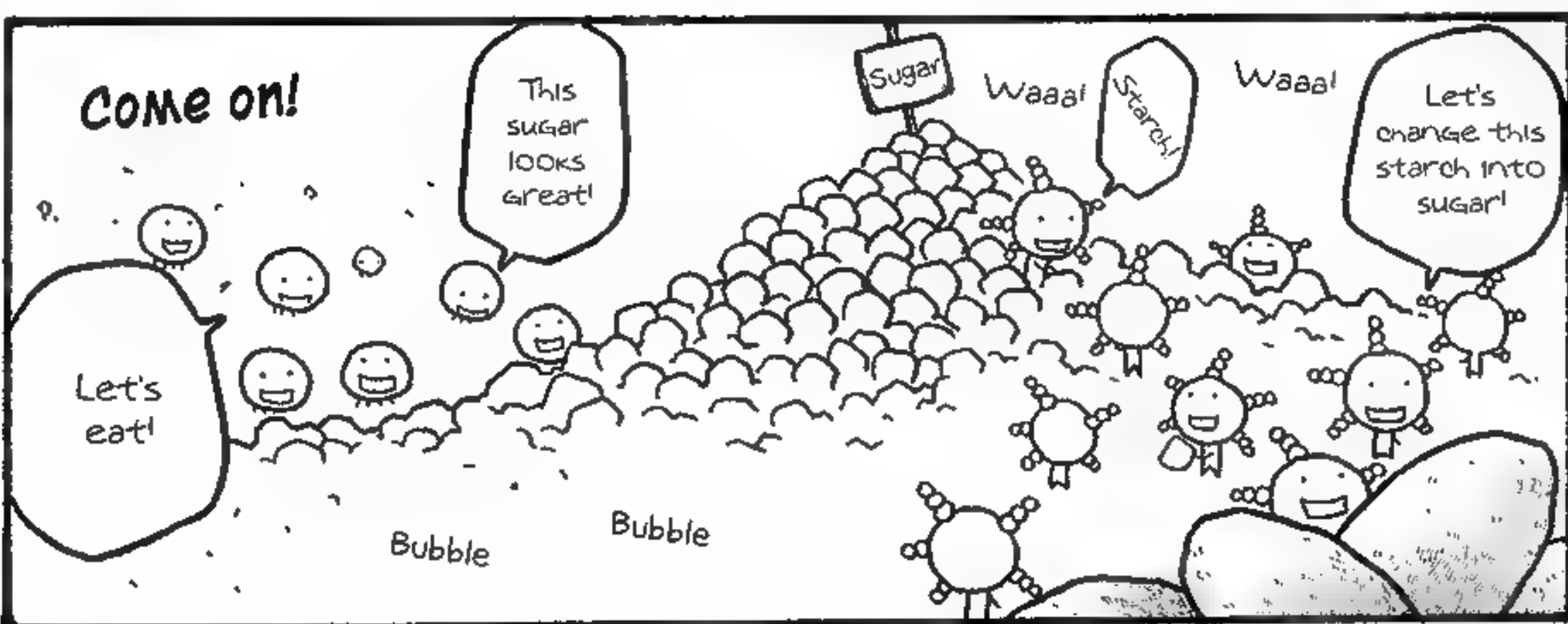
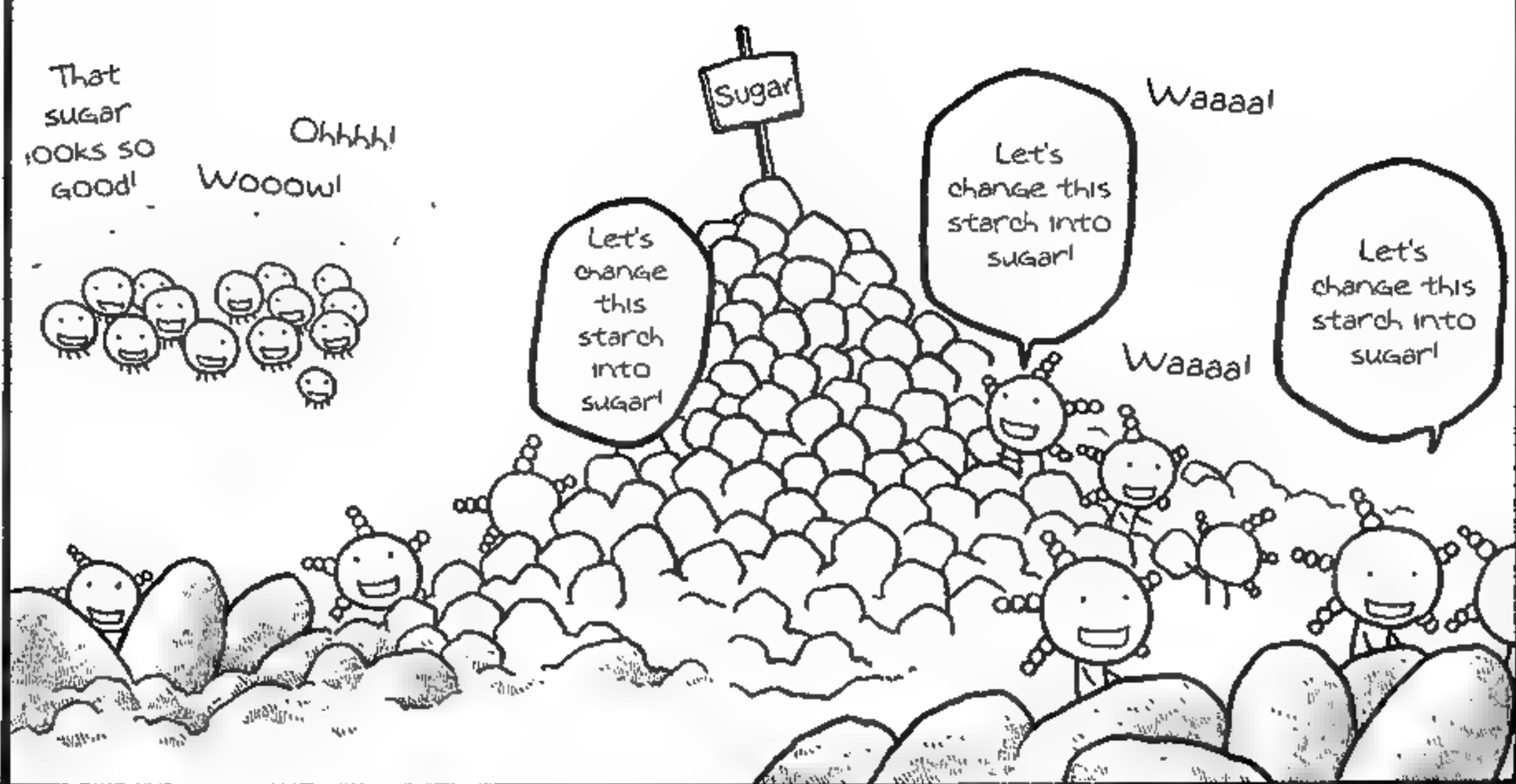
L. lactis
It does away with the other microbes. Instead of a rice ball, you can also use yogurt.

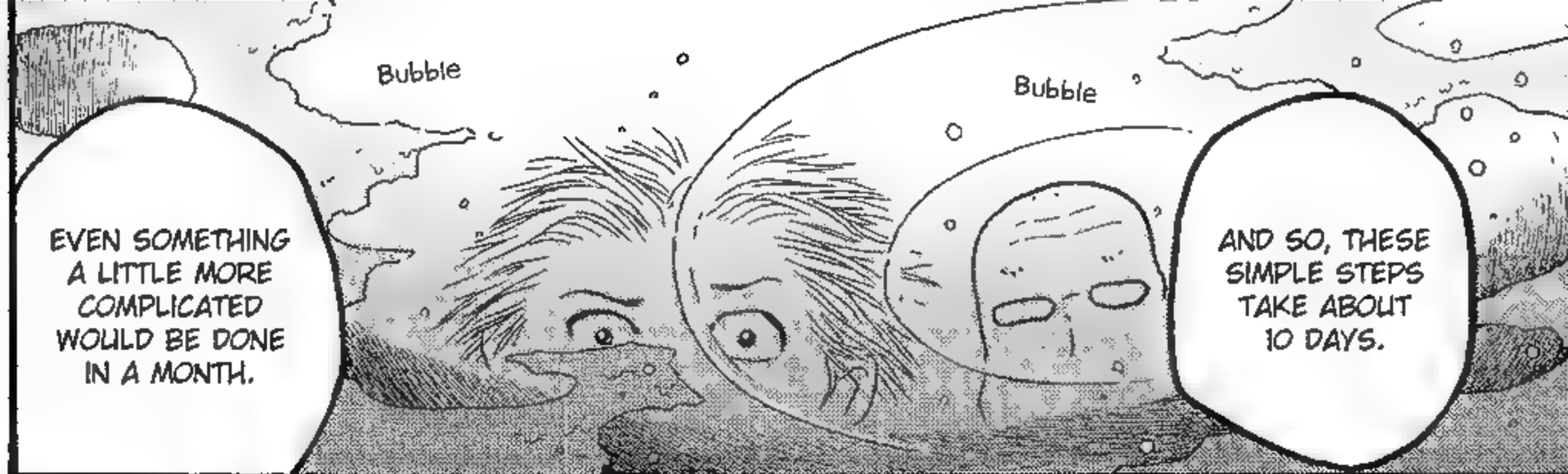


A. oryzae
It's kinda late saying this now, but this is the representative microbe of brewing in Japan. It's very strong at saccharifying starch and producing glucose. It's most active around 50°C.



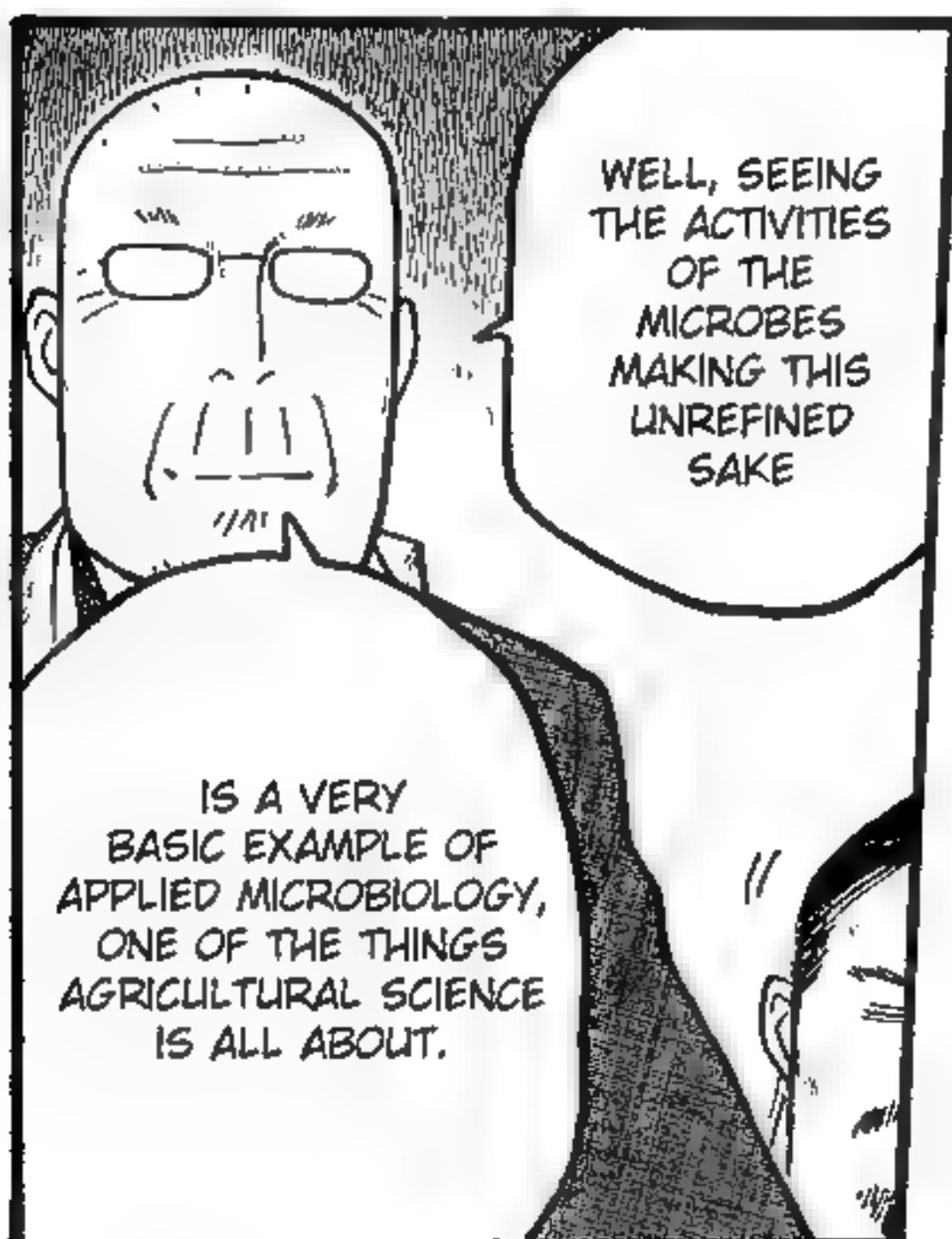

S. cerevisiae
 ①
 It multiplies at a moderate temperature of 25°C. It's a representative yeast, but it's still a secret that it has an extremely similar friend named S. sake





EVEN SOMETHING
A LITTLE MORE
COMPLICATED
WOULD BE DONE
IN A MONTH.

AND SO, THESE
SIMPLE STEPS
TAKE ABOUT
10 DAYS.



WELL, SEEING
THE ACTIVITIES
OF THE
MICROBES
MAKING THIS
UNREFINED
SAKE

IS A VERY
BASIC EXAMPLE OF
APPLIED MICROBIOLOGY,
ONE OF THE THINGS
AGRICULTURAL SCIENCE
IS ALL ABOUT.



SO BASICALLY,
YEAST POOPS
OUT ALCOHOL.

WHEN IT HAS
TO DO WITH
FERMENTATION,
WE CALL IT
THE MICROBE'S
"PRODUCT", NOT
ITS POOP.



WOULD
YOU LIKE
TO TRY IT?

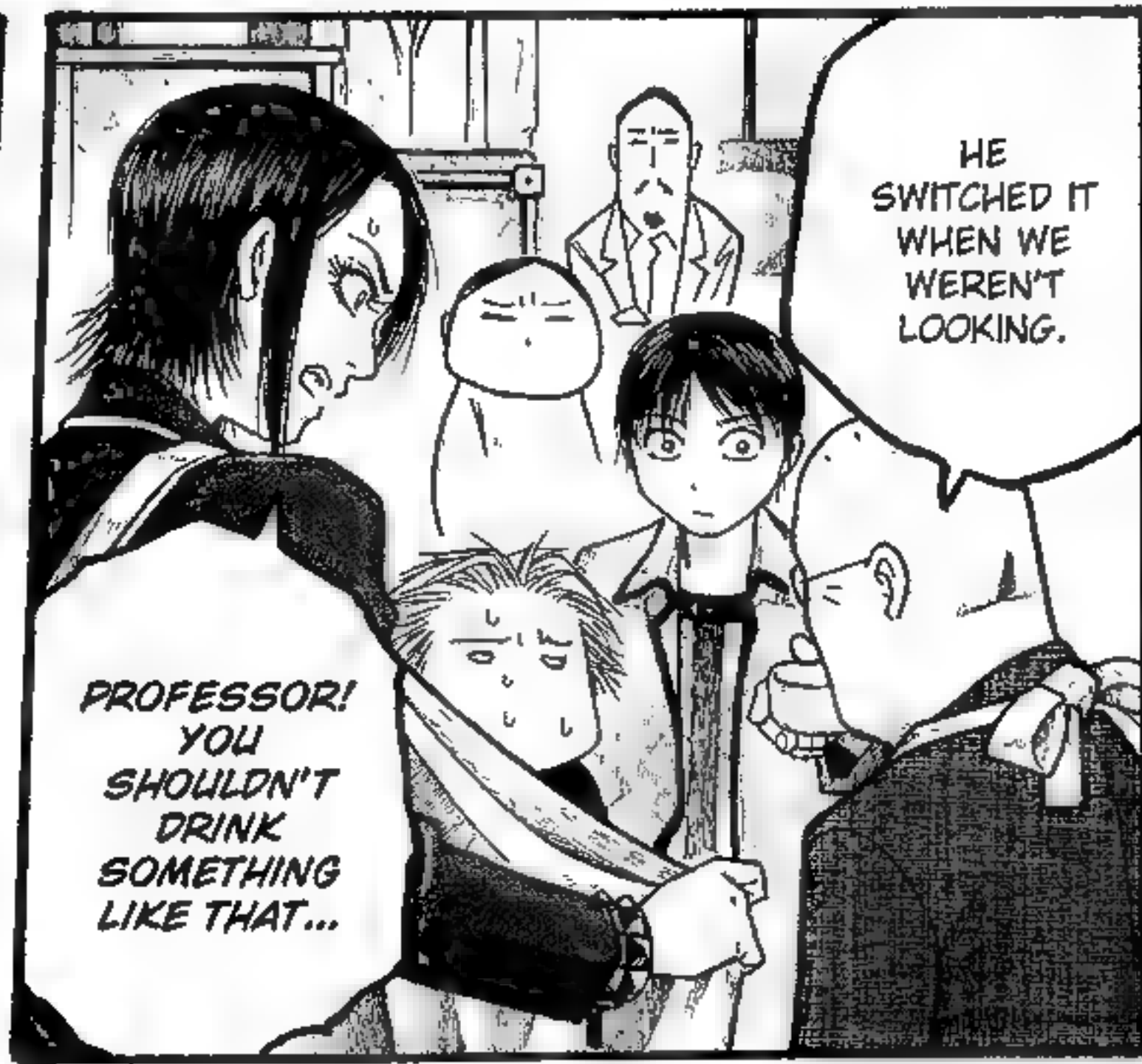
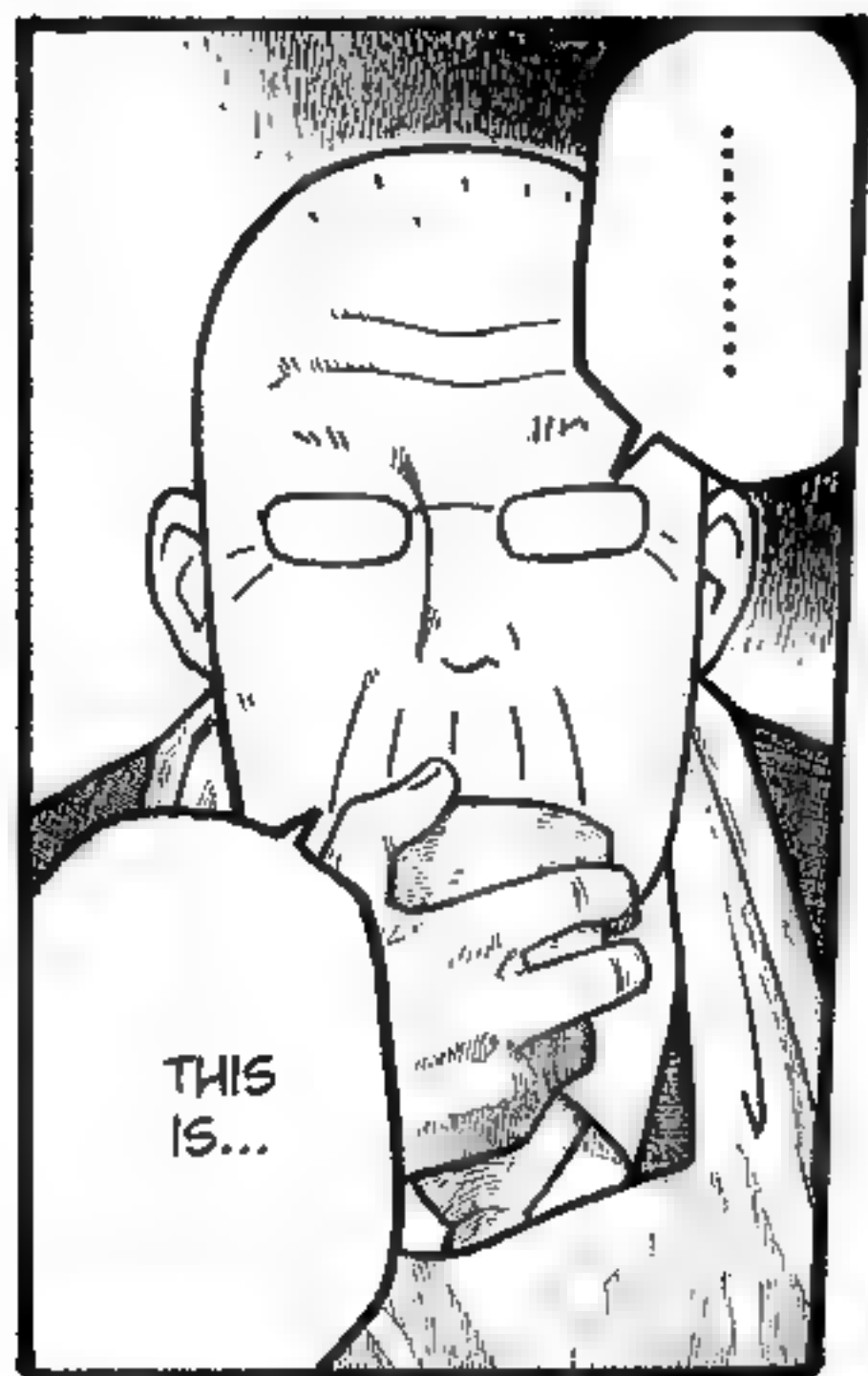
HASEGAWA-KUN,
PASS SOME OUT.



AND SO, THE
FERMENTATION
PROCESS IN
THIS JUG

HAS
PROGRESSED
ENOUGH FOR
THIS UNREFINED
SAKE TO BE
DRINKABLE.



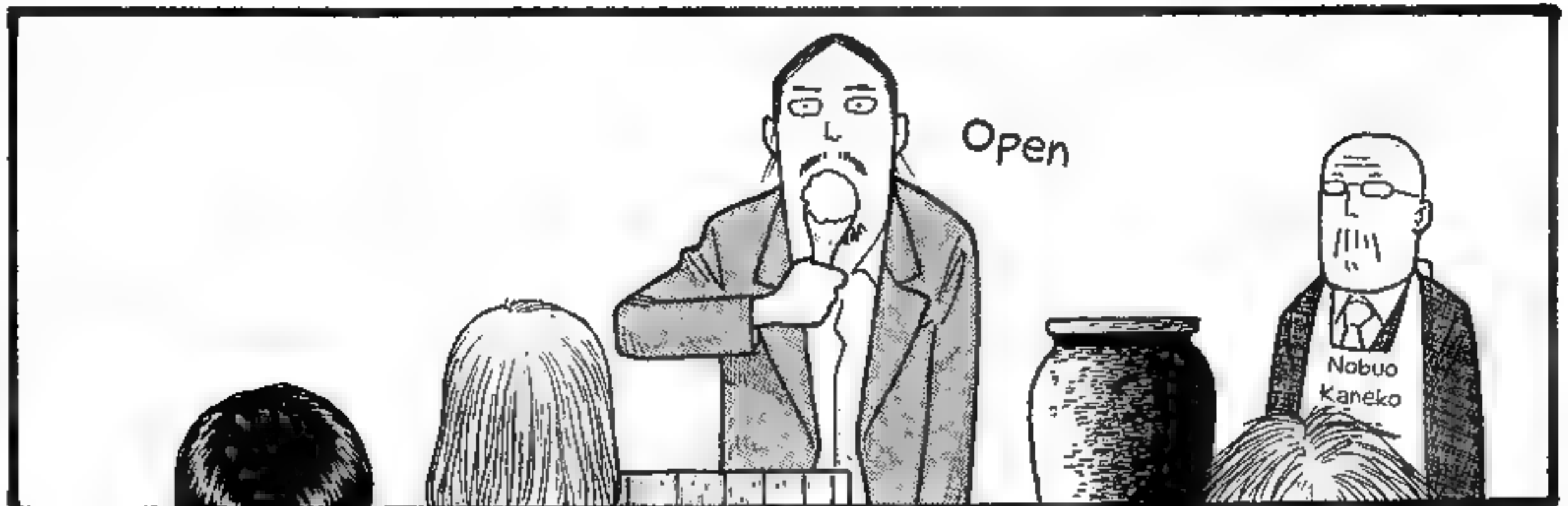



Takuma Kawahama
He's a second-year
He's in debt along with Misato.
He showcases his trivial knowledge again in this chapter.

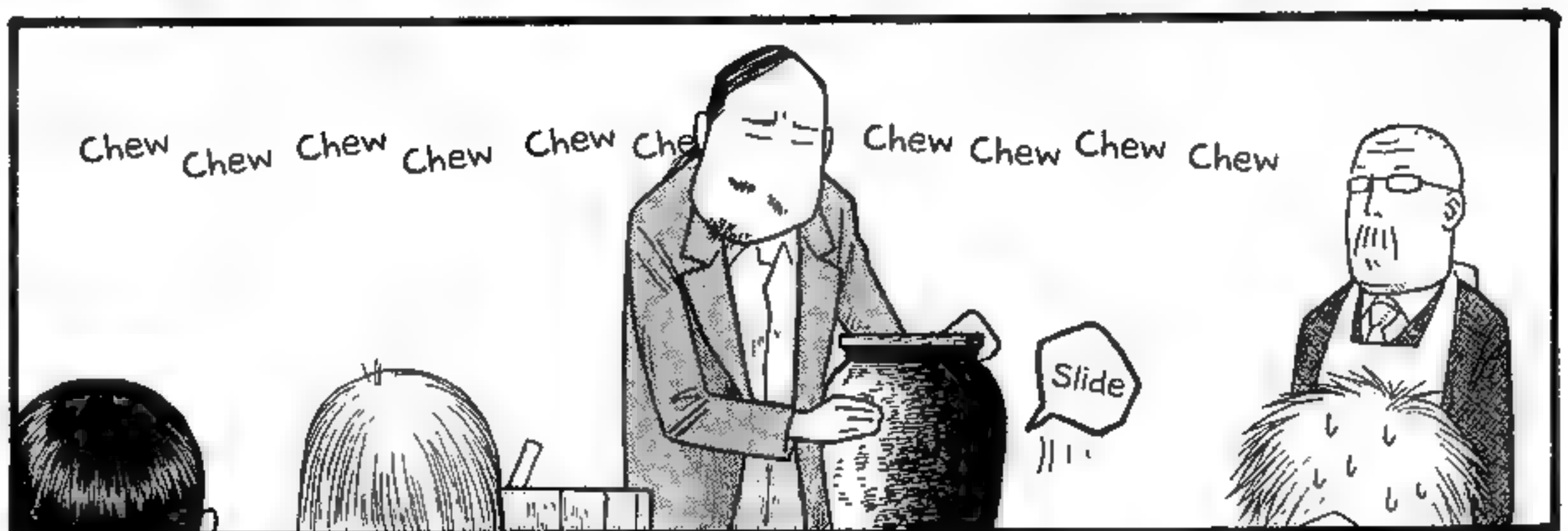
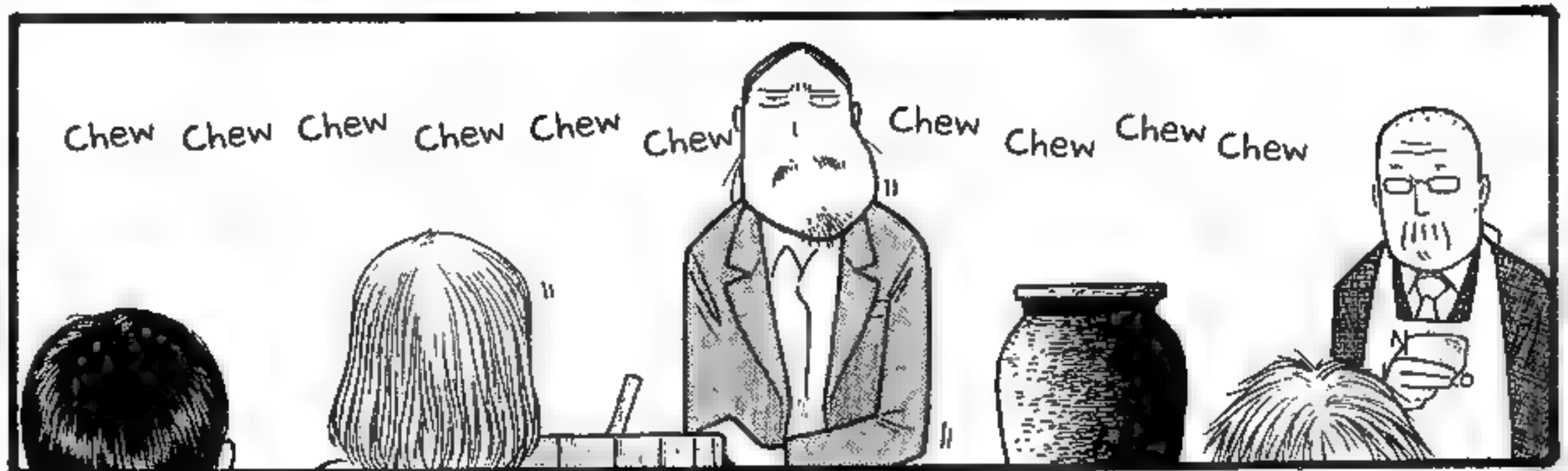


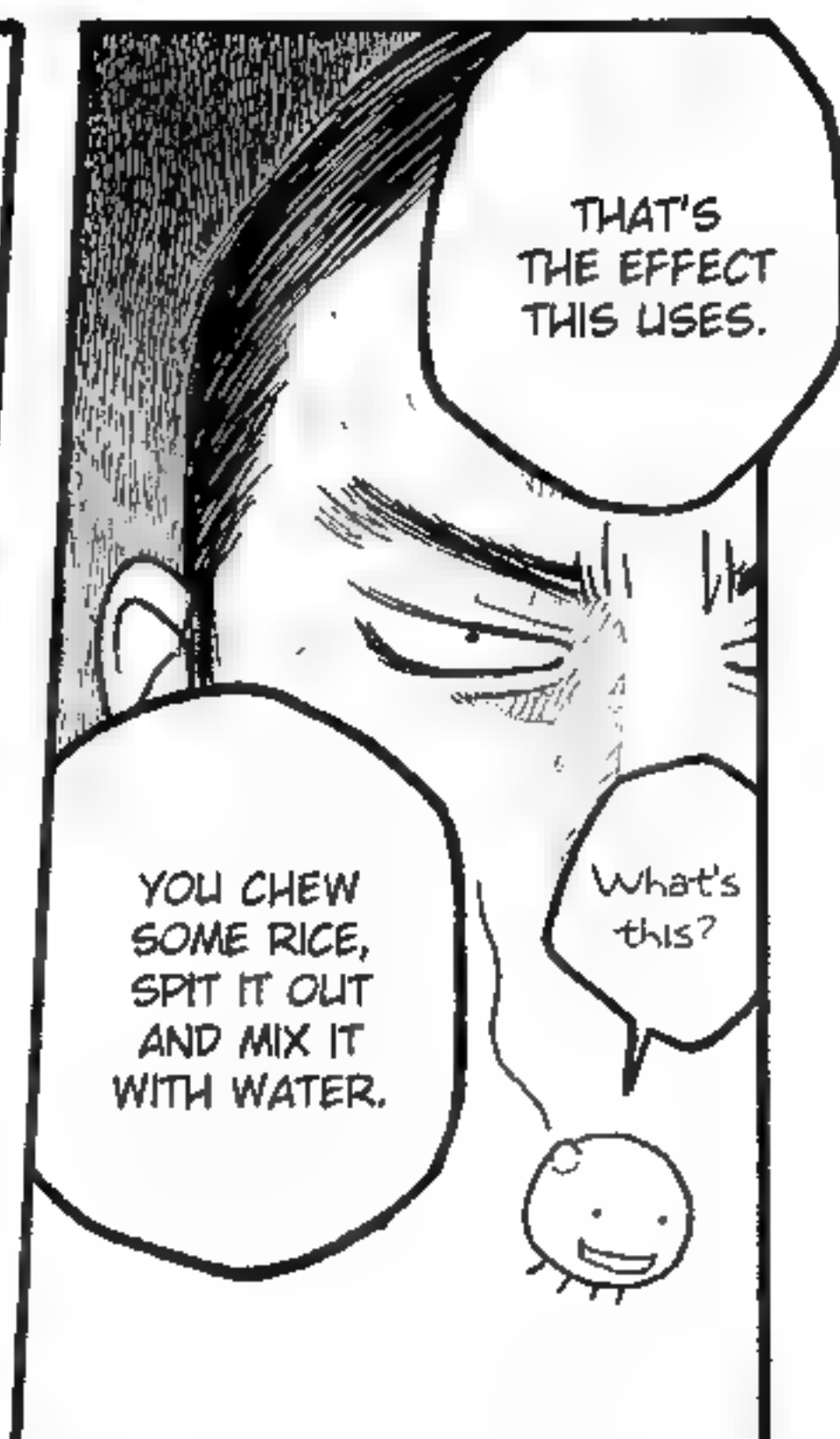
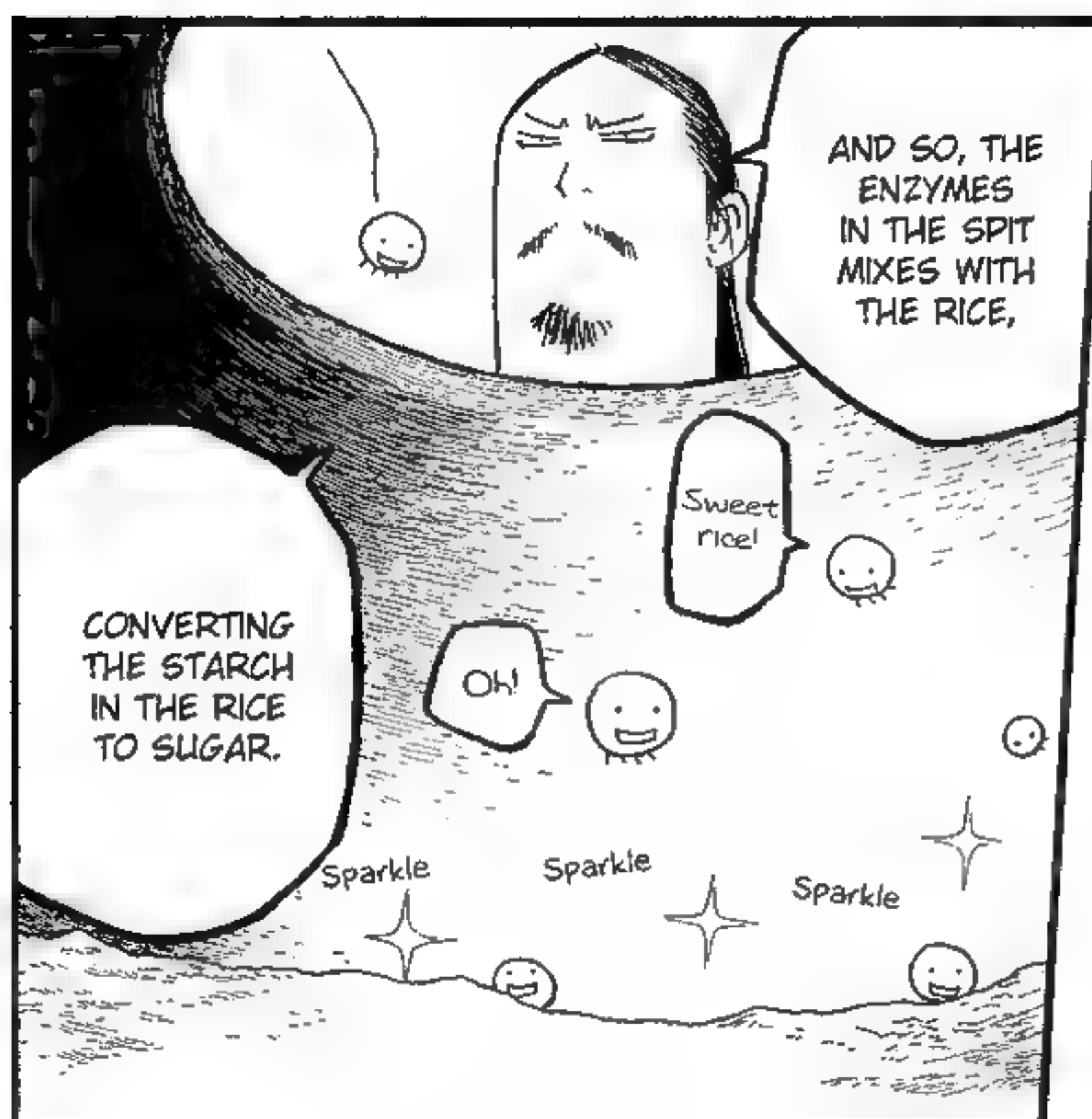
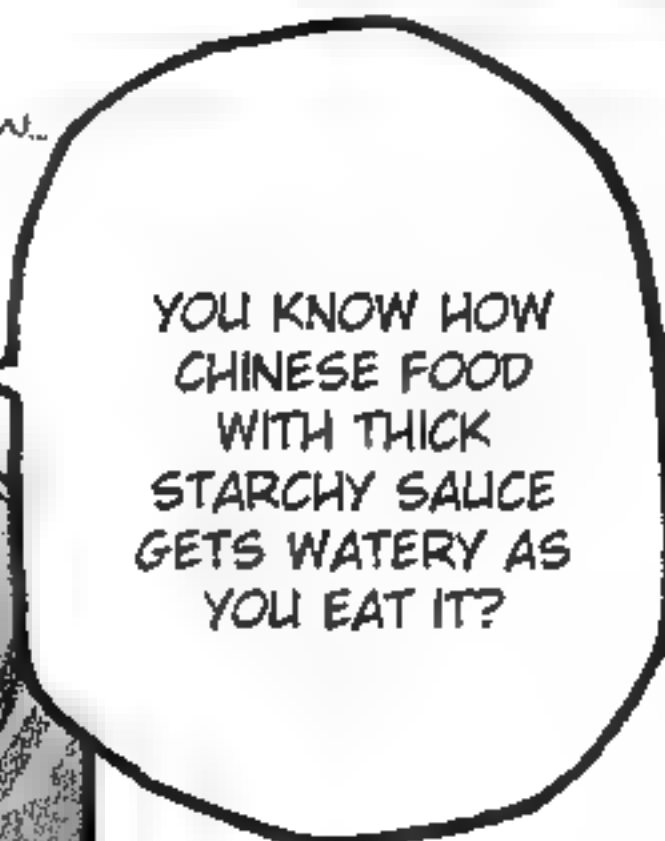
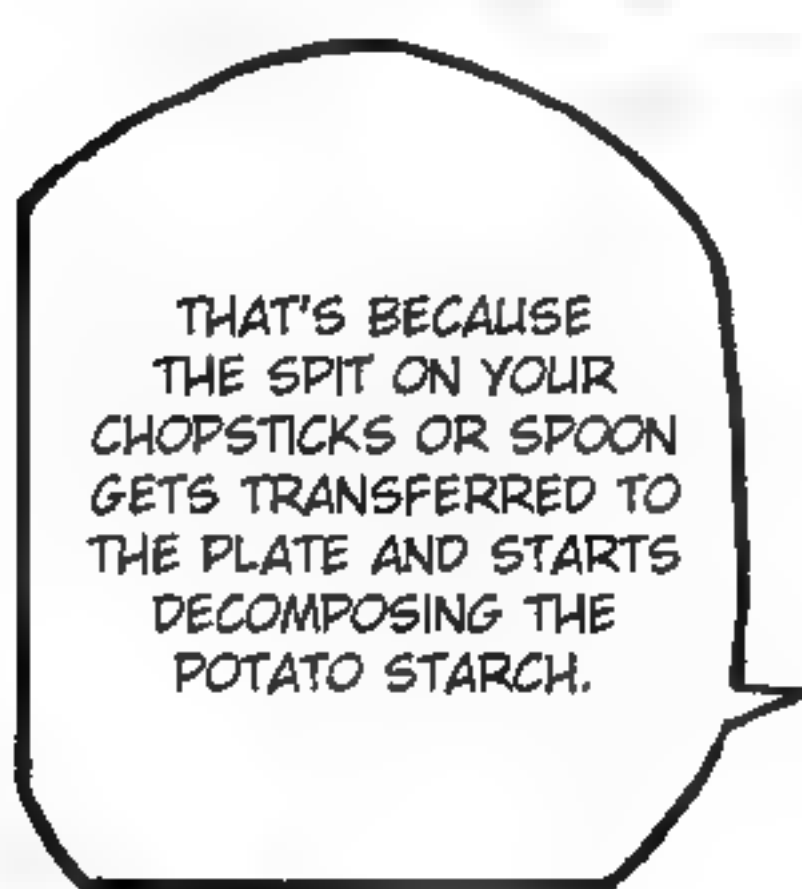
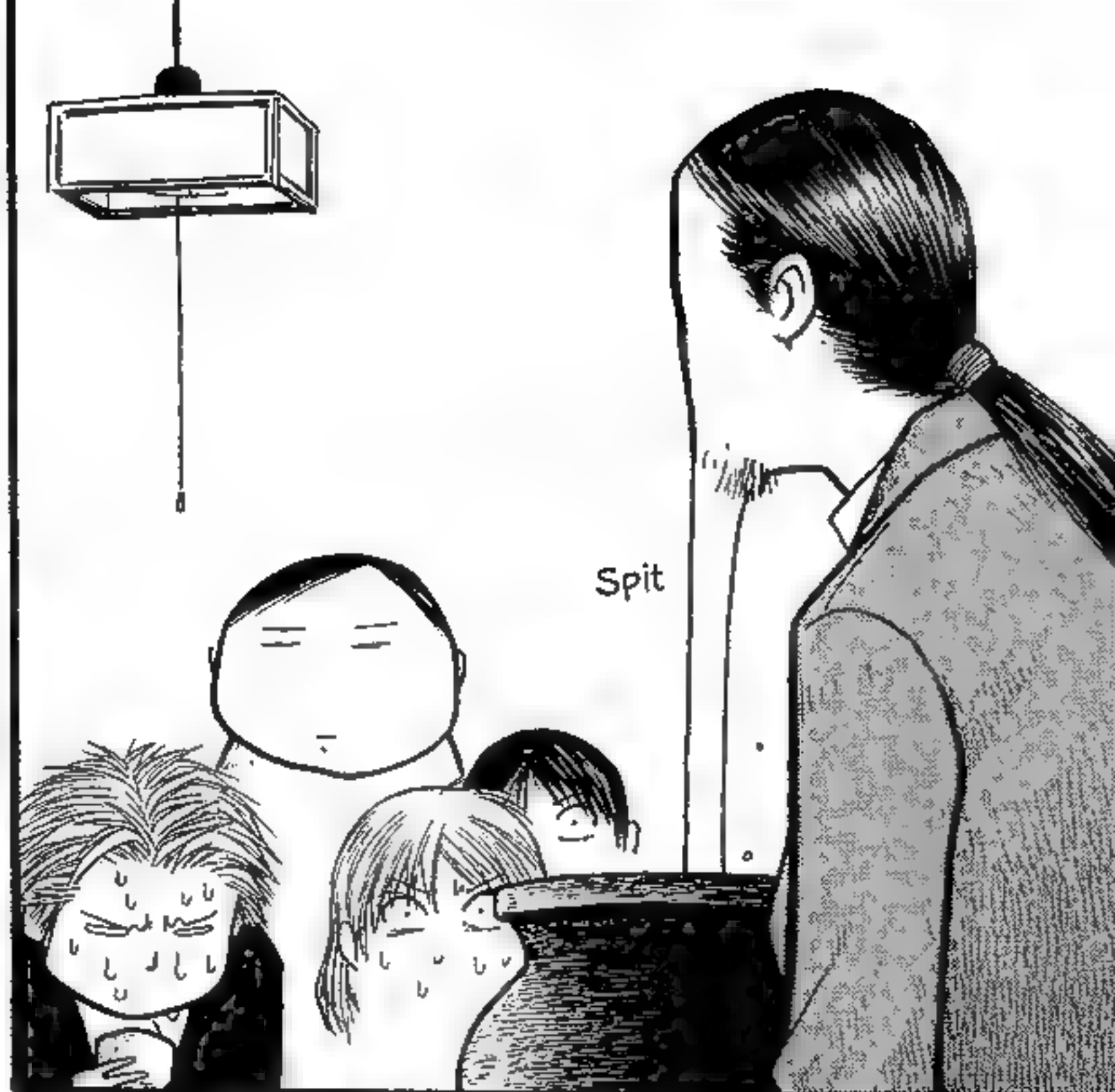


Keizou Itsuki
He's a professor at a certain agricultural university. He may be wordy, but he's not Nobuo Kaneko-san.



Haruka Hasegawa
She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She's made Yuuki her servant.

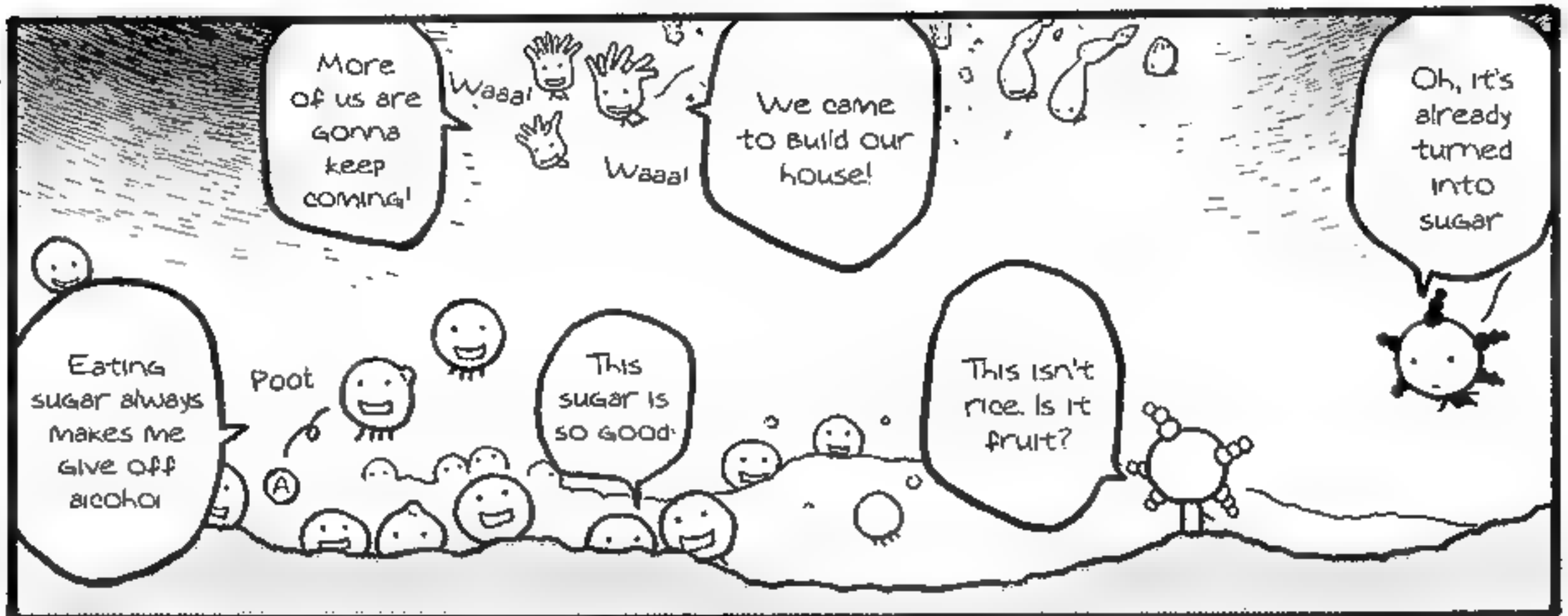






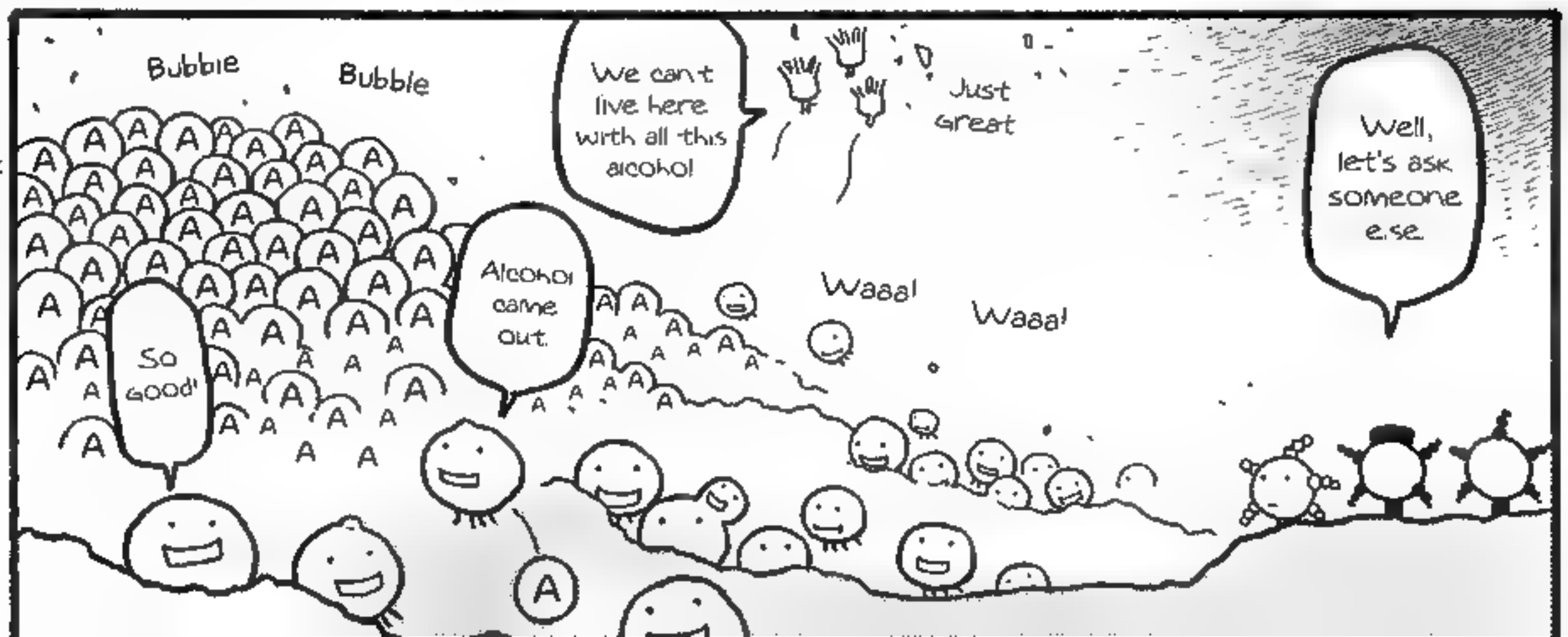
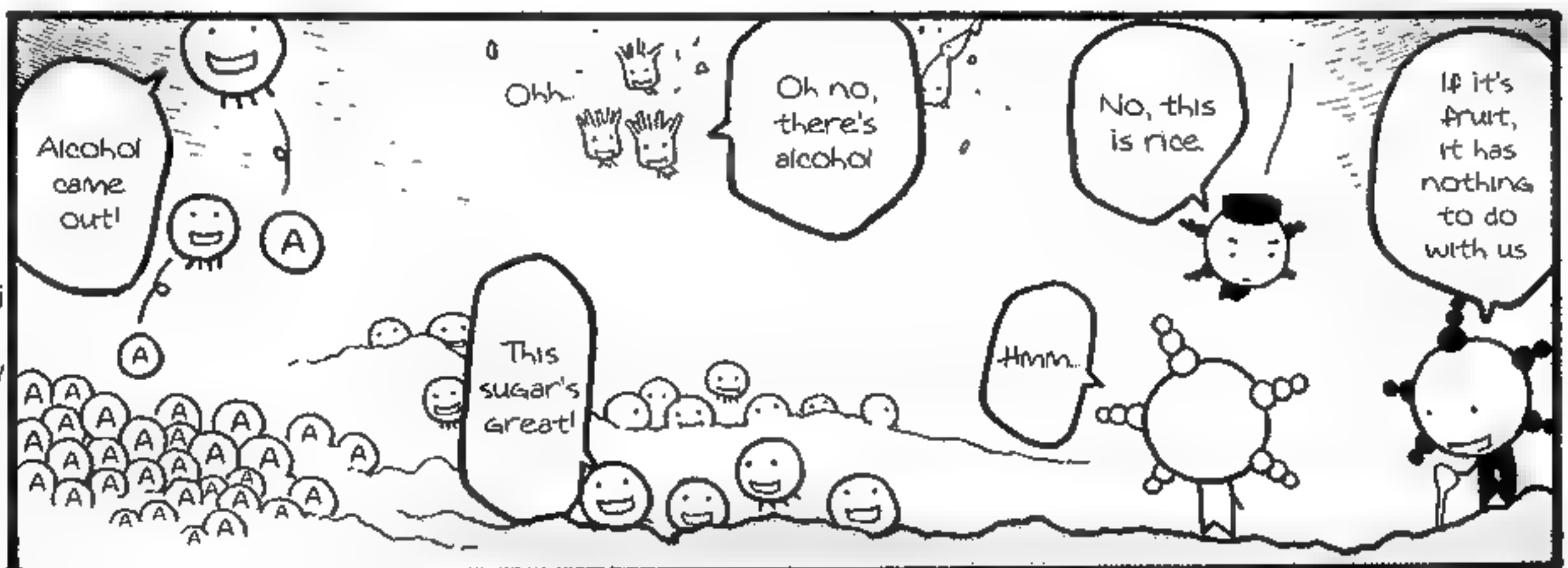
A. niger

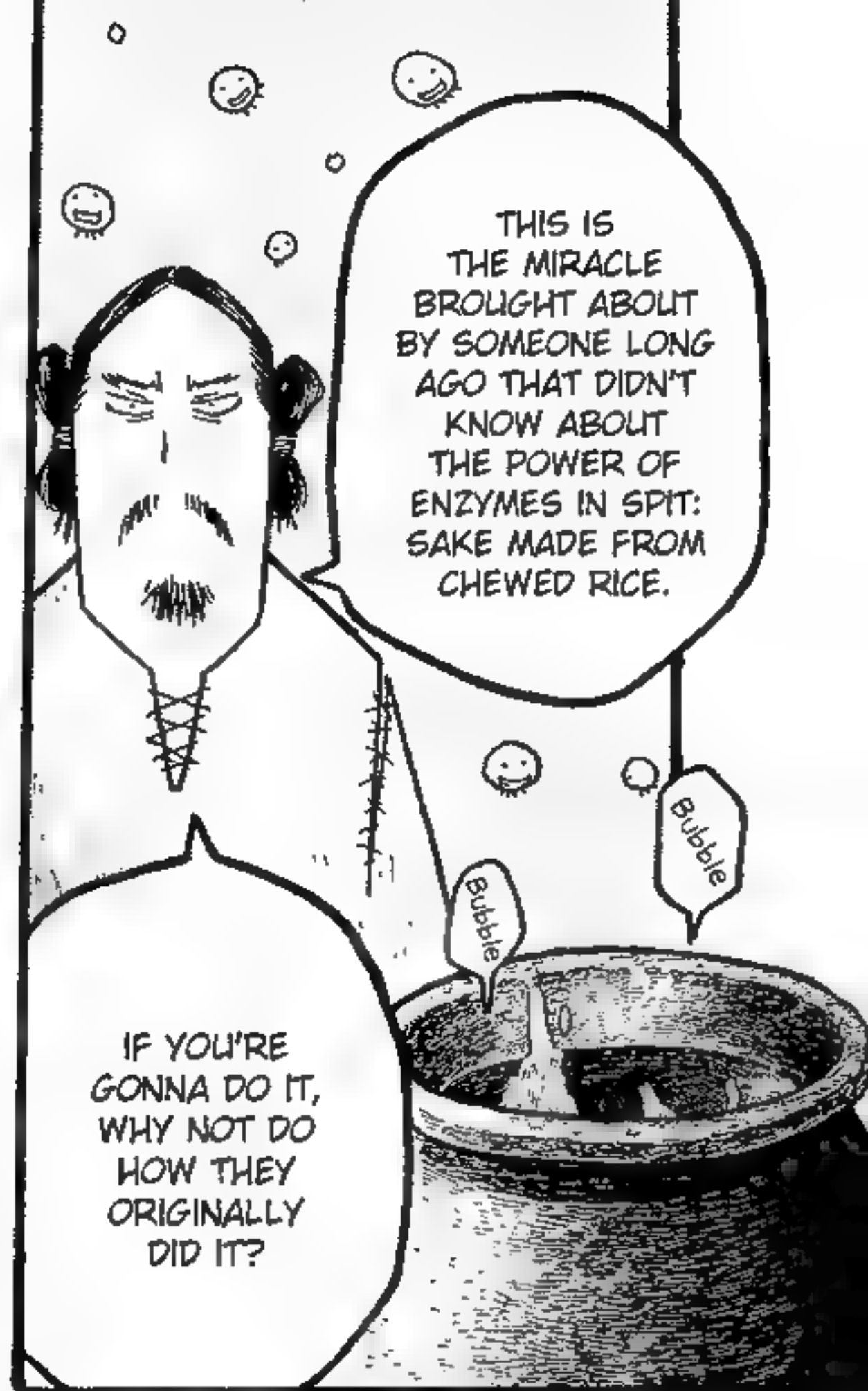
Also known as black mold, it's a favorite microbe for brewing shochu. It's also used a lot in industrial production.



A. awamori

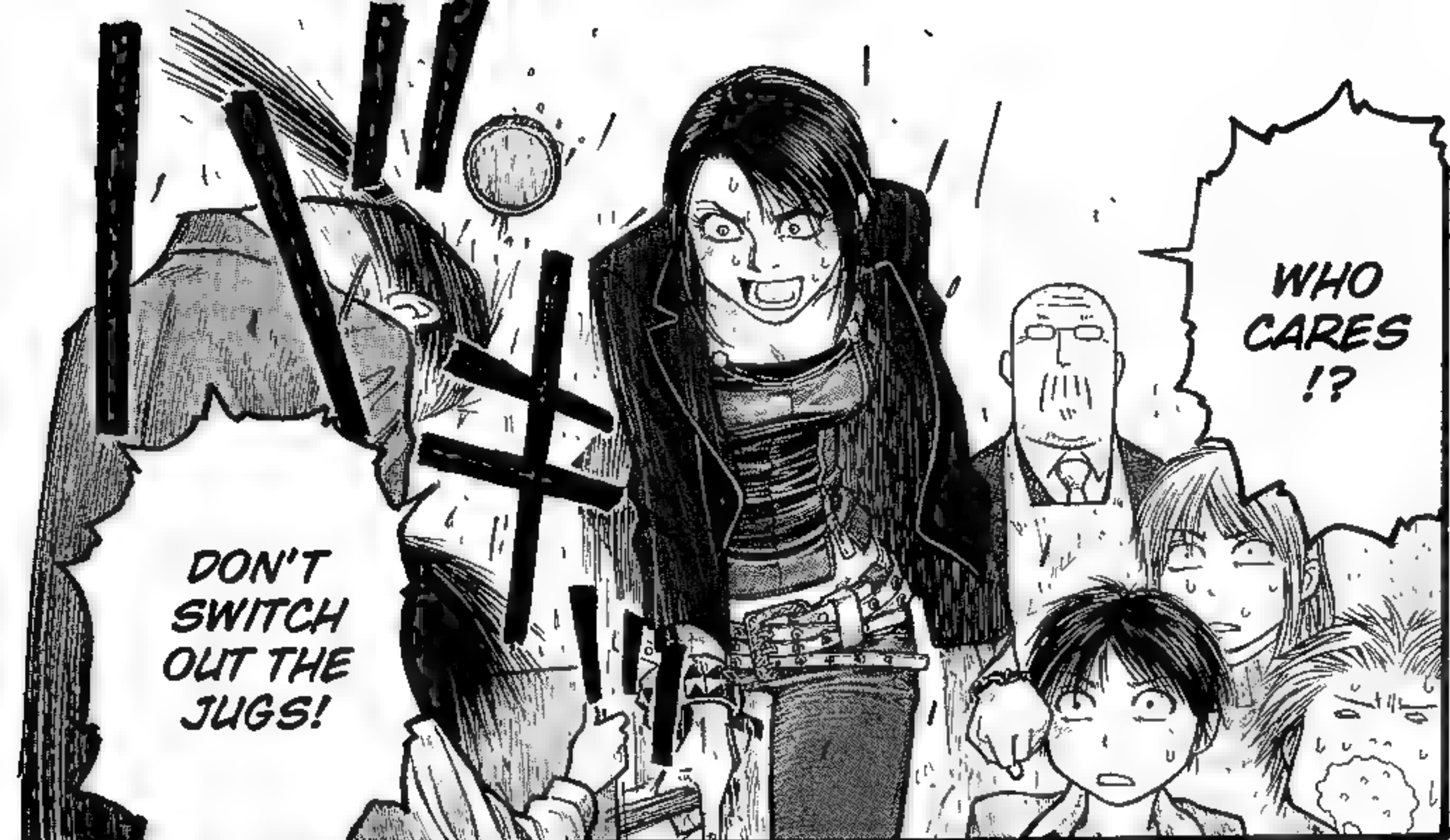
Together with its ability to convert starch into sugar, it's very good at citric acid fermentation, and because of its ability to defend against harmful bacteria it's used a lot in brewing in warm climates.



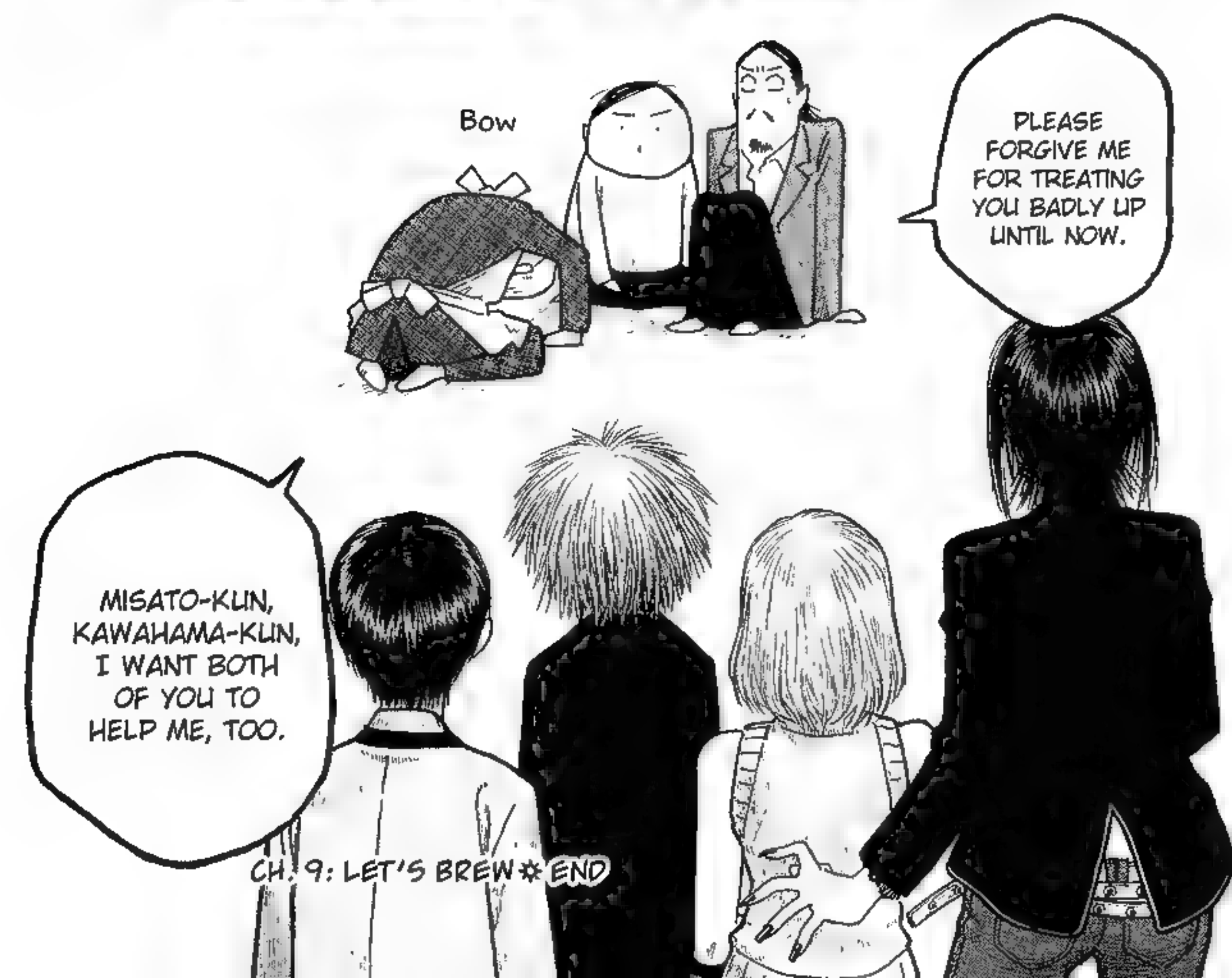
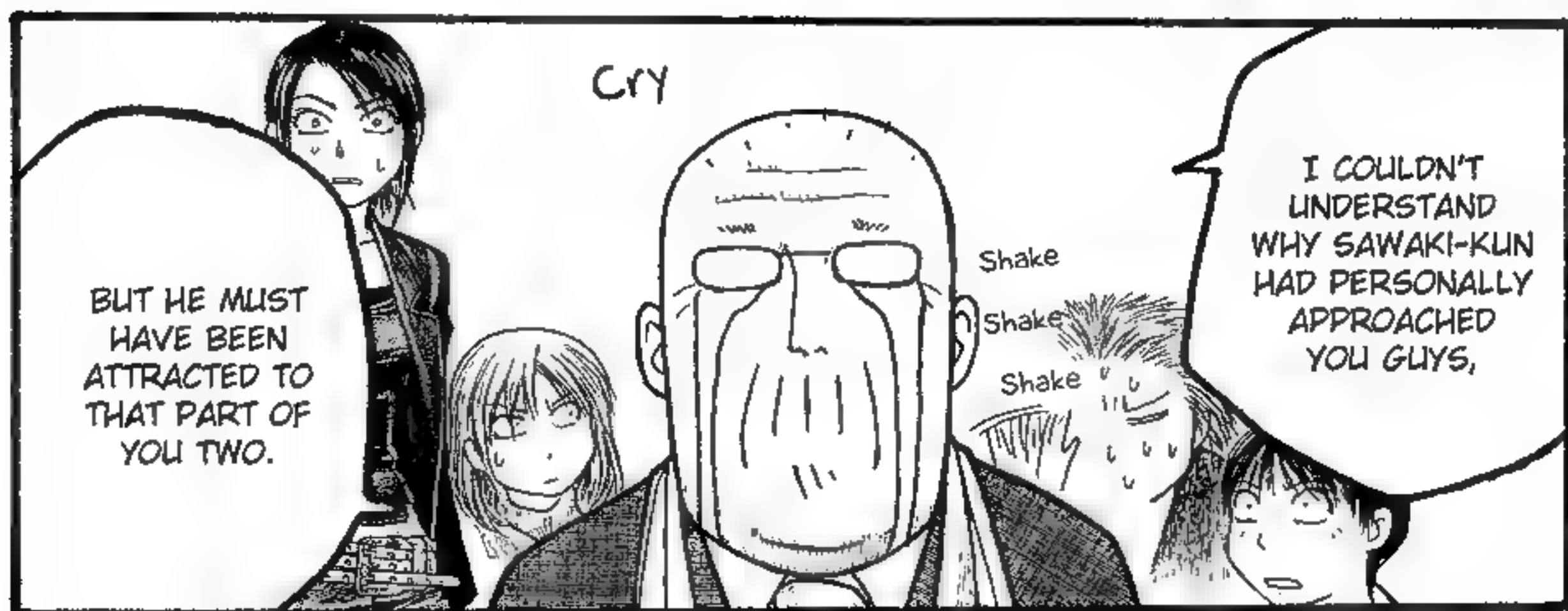


The case wrapped around the eggs of a praying mantis is a good example.





Did you learn something?

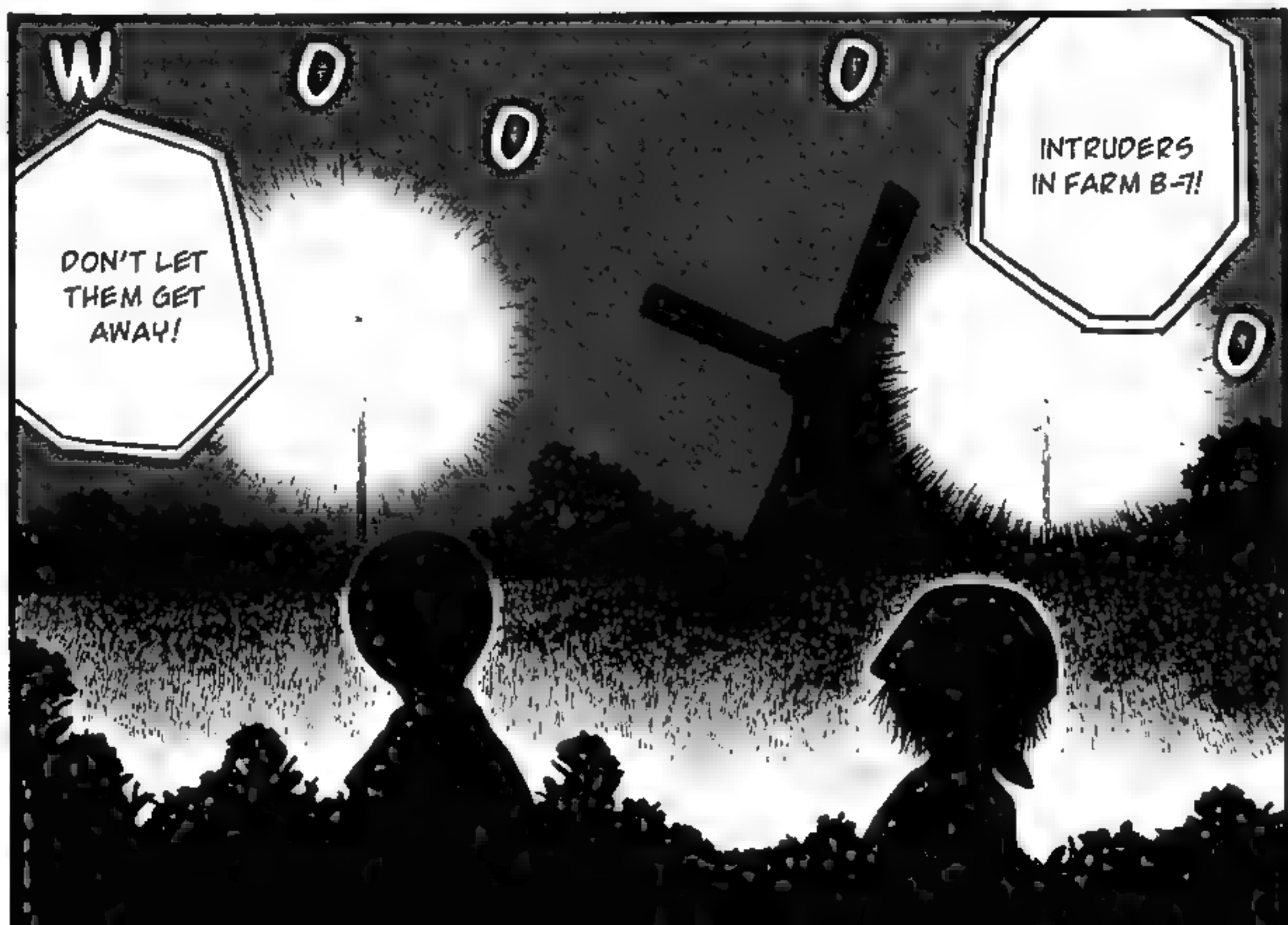
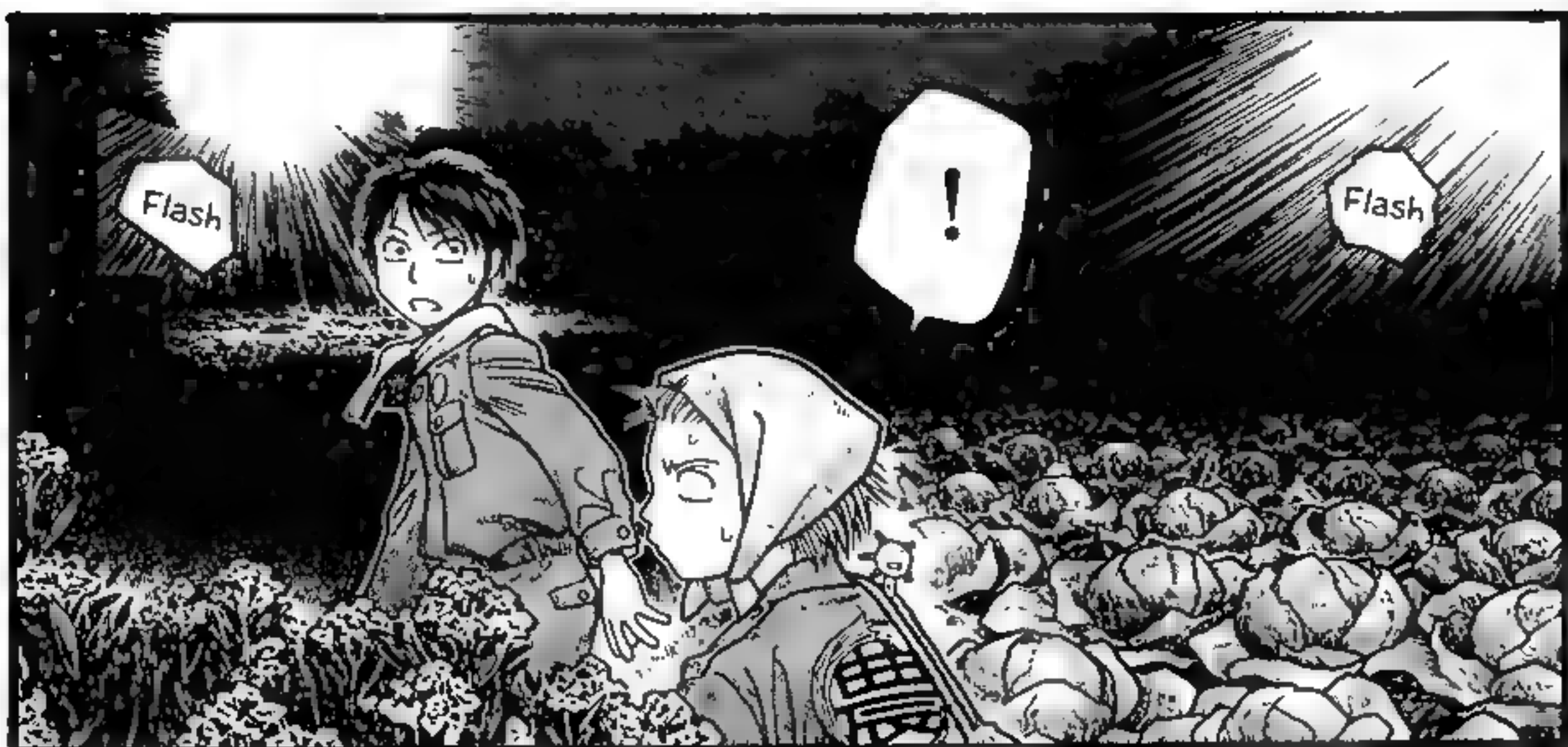




Hachimitsu Scans

~sweeter than honey~

hachimitsu-scans.blogspot.com



This is the first "action chapter".



Happy 2005 to you.

農物語

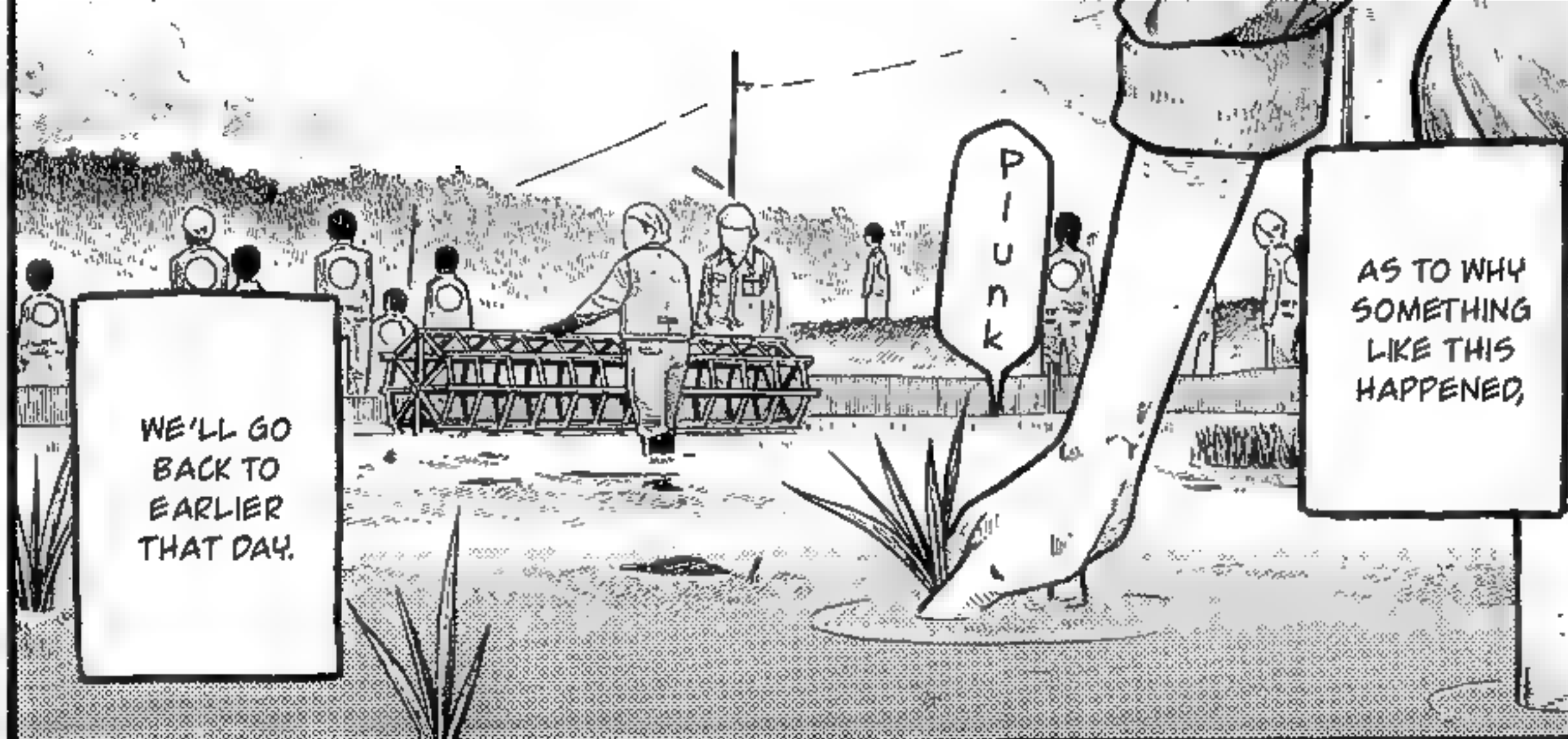
TALES OF AGRICULTURE


W

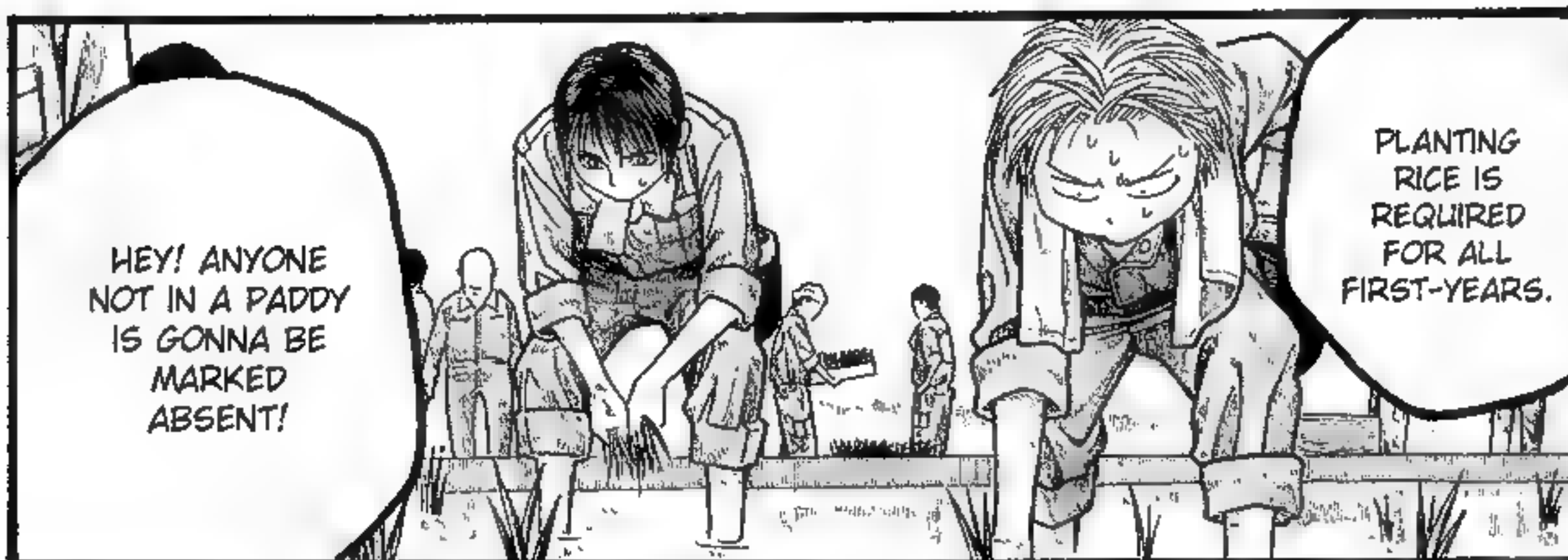
WHY ARE
THERE SO
MANY PEOPLE
HERE!?


WE...
WE'RE
SURROUNDED!

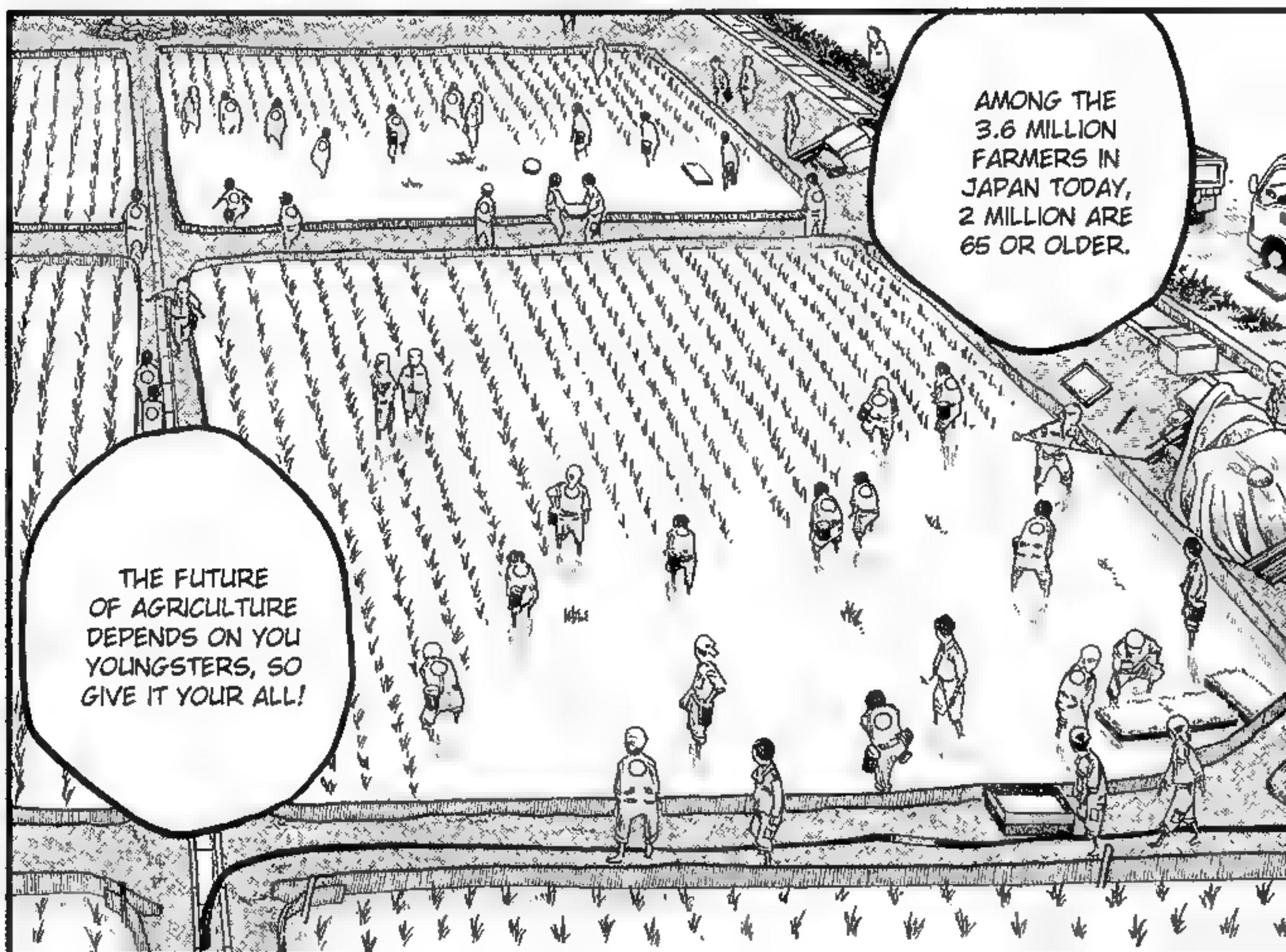
CH. 10: SPRING

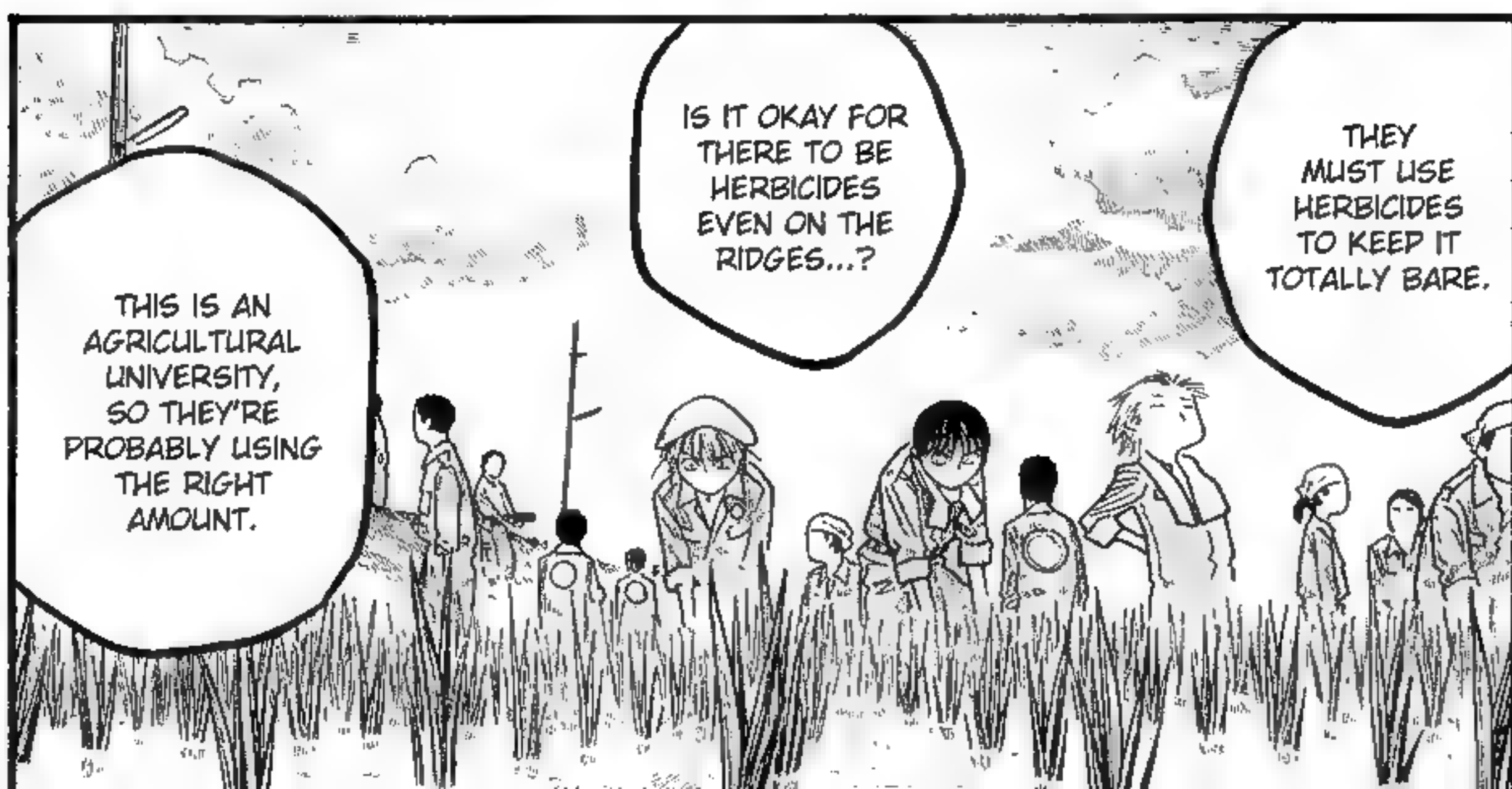
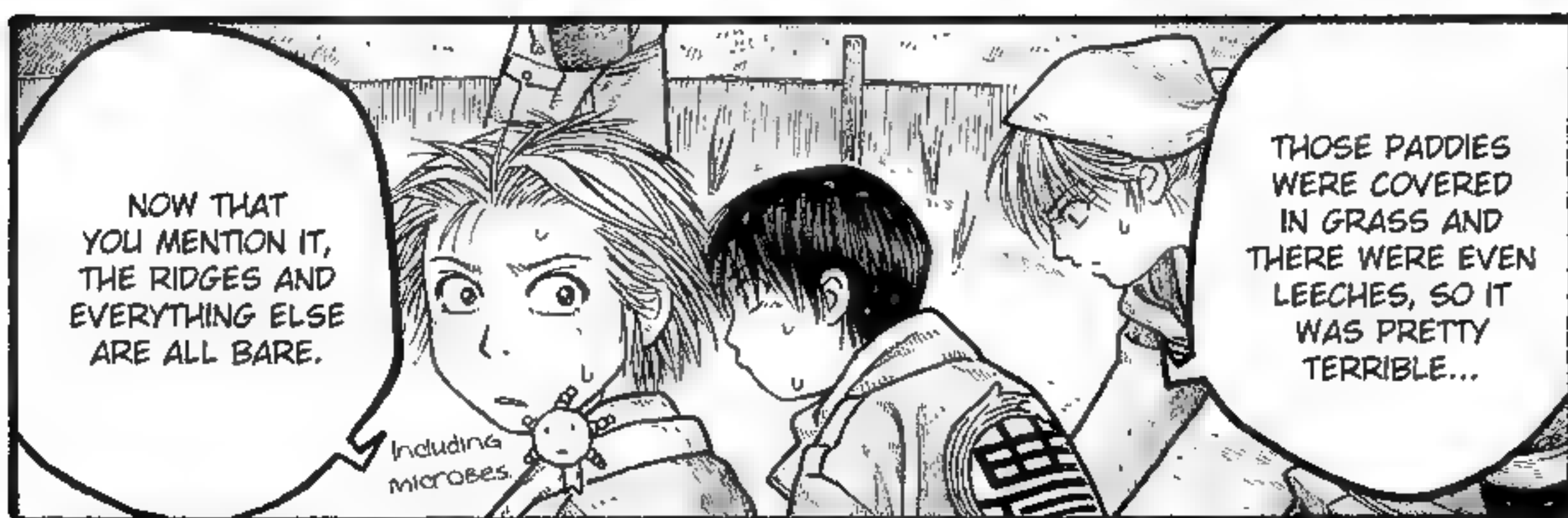



Tadayasu Sawaki
He's the main character. For some reason, he can see microbes. He's the culprit this time.




Kei Yuuki
He's been Sawaki's friend since they were kids and his parents run a sake brewery. He goes through hell because of Sawaki.





HEY, ARE YOU
GUYS GOING TO
THE PROFESSOR'S
LAB AGAIN TODAY?

WE'RE
FINALLY DONE!
THE SUN'S
ALREADY
GOING DOWN.

LIKE THAT
COCKROACH
AND SPIT
SAKE.

THAT
WASN'T THE
PROFESSOR.

WHENEVER
WE'RE AROUND
HIM, HE ALWAYS
MAKES US EAT
SOMETHING
WEIRD.

IT'S NOT LIKE
I GO SEE HIM
EVERY DAY
BECAUSE I
WANT TO.

You
smell all
sweaty!



Hazuki
Oikawa
Like Sawaki
and Yuuki,
she's a
first-year
at the
agricultural
university
She's
apparently in
the same
class as
Sawaki and
Yuuki.

HM?

Waaa!

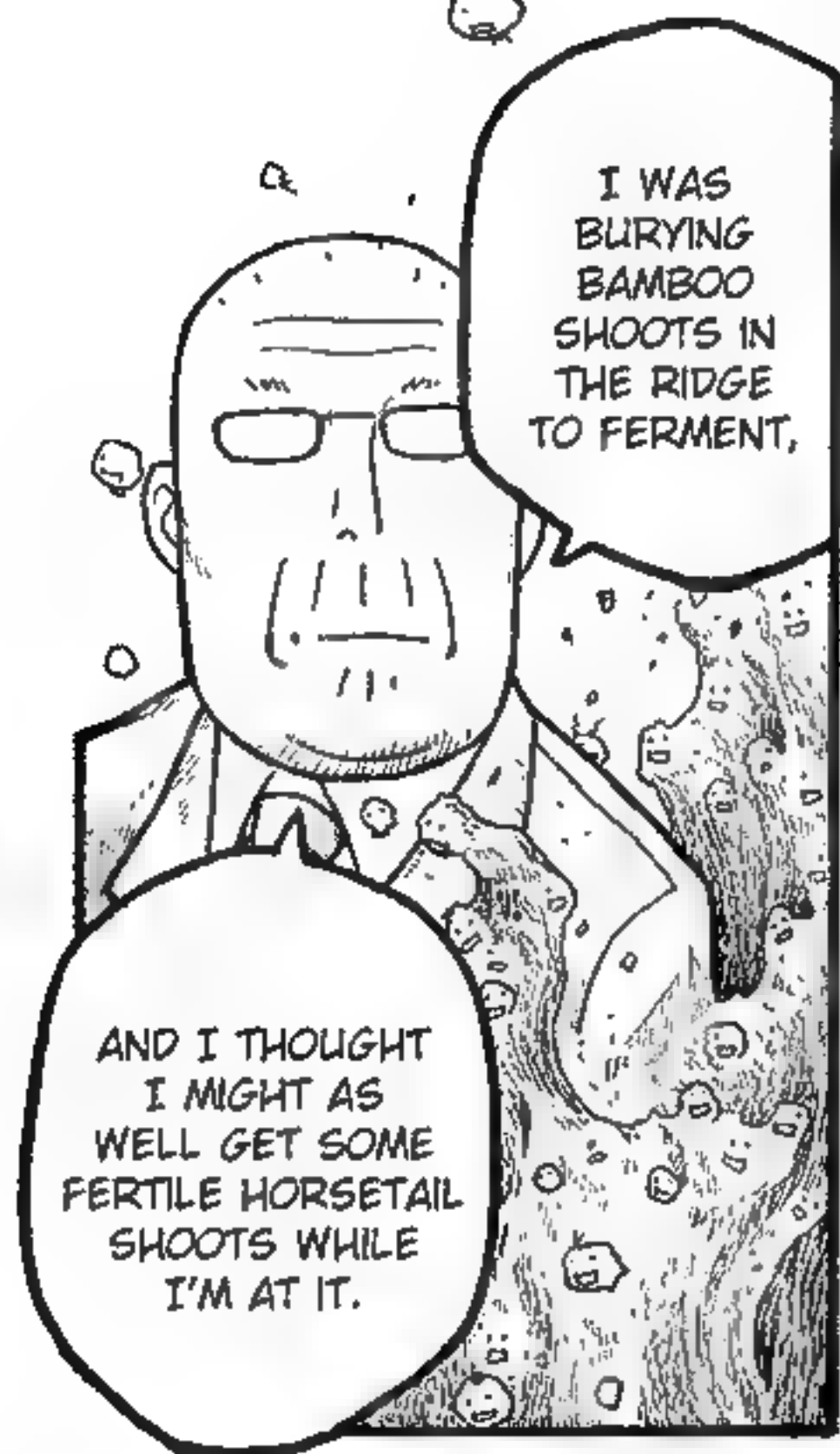
Waaa!

Shrrr

Shrrr



A. oryzae
Although
it shows up
in every
chapter,
it's the
represent-
ative
microbe for
brewing in
Japan. Is it
often seen
riding on
Sawaki's
shoulder
because it
came from
his house!?



I WAS
BURYING
BAMBOO
SHOOTS IN
THE RIDGE
TO FERMENT,

AND I THOUGHT
I MIGHT AS
WELL GET SOME
FERTILE HORSETAIL
SHOOTS WHILE
I'M AT IT.



HEY,
GUYS.

ARE YOU
DIGGING UP
SOMETHING
AGAIN?



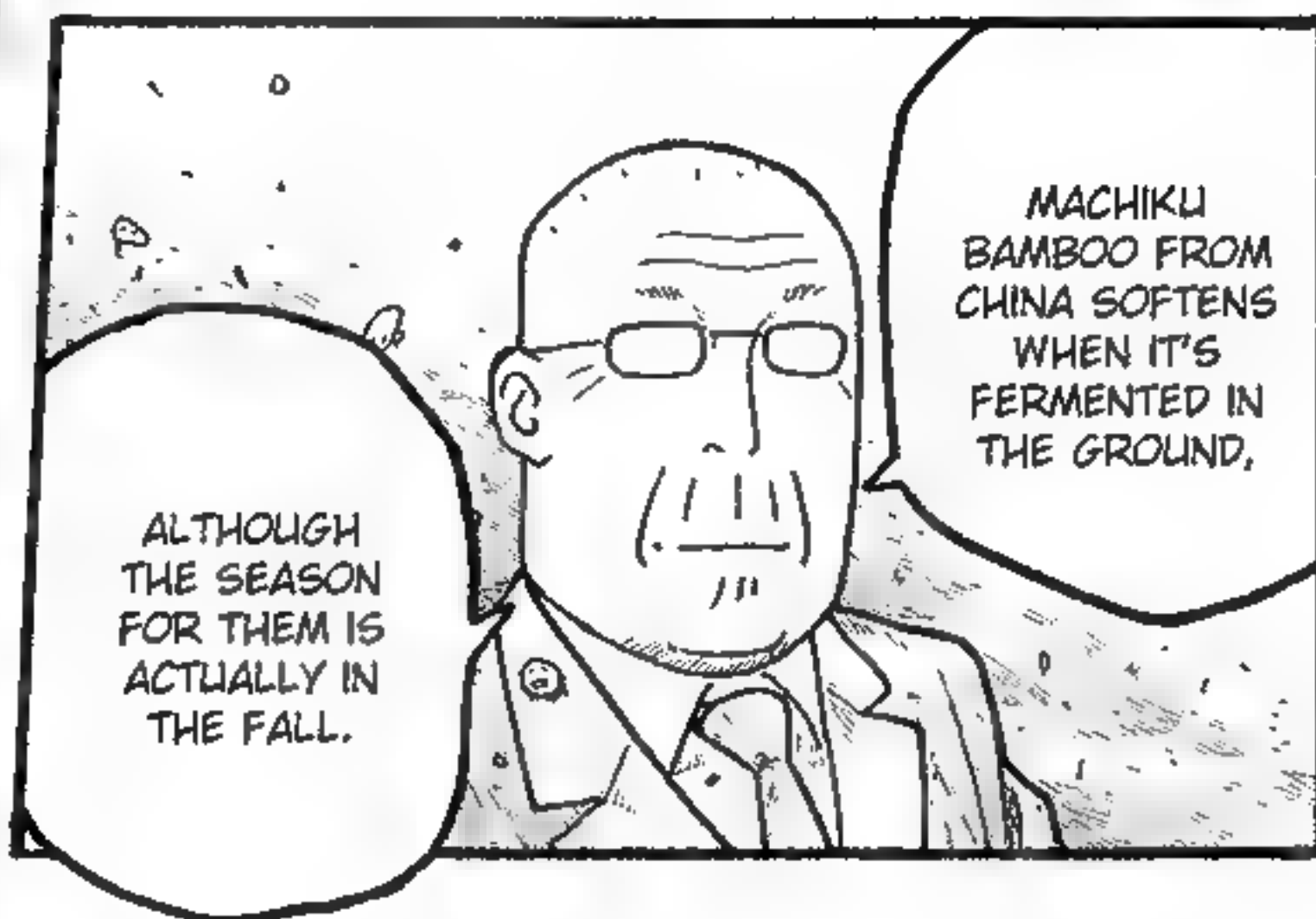
COME TO THINK
OF IT, EVEN
THOUGH THERE
WEREN'T THAT
MANY IN THE
PADDIES WE
WERE IN,

THERE ARE
A TON OF
MICROBES IN
THE SOIL HERE.



HUH?
THOSE ARE
FERMENTED,
TOO?

BAMBOO
SHOOTS? YOU
MEAN THOSE
THINGS THAT
GO ON TOP
OF RAMEN
NOODLES?



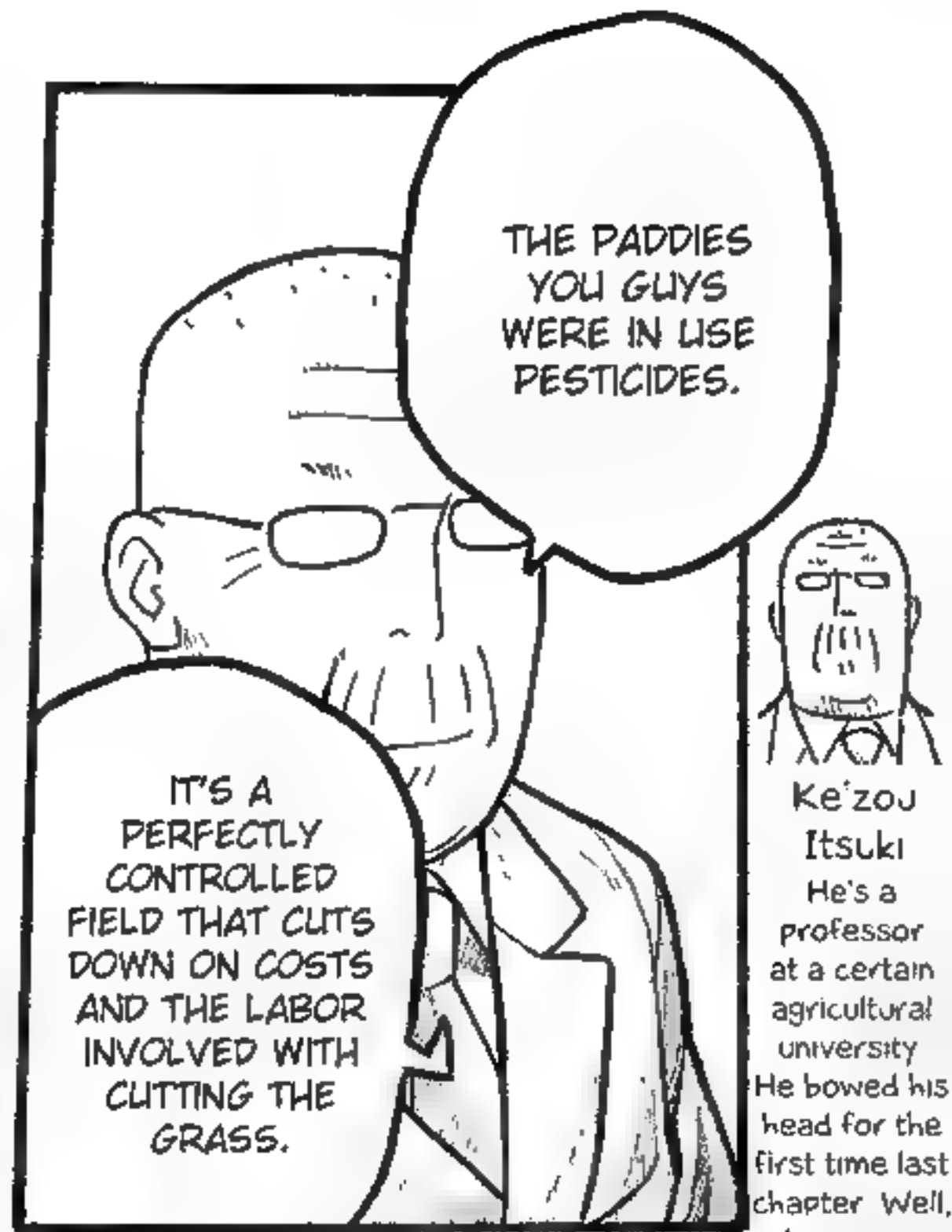
ALTHOUGH
THE SEASON
FOR THEM IS
ACTUALLY IN
THE FALL.

MACHIKU
BAMBOO FROM
CHINA SOFTENS
WHEN IT'S
FERMENTED IN
THE GROUND,



THIS FIELD
ISN'T BEING
CULTIVATED
ANYMORE,

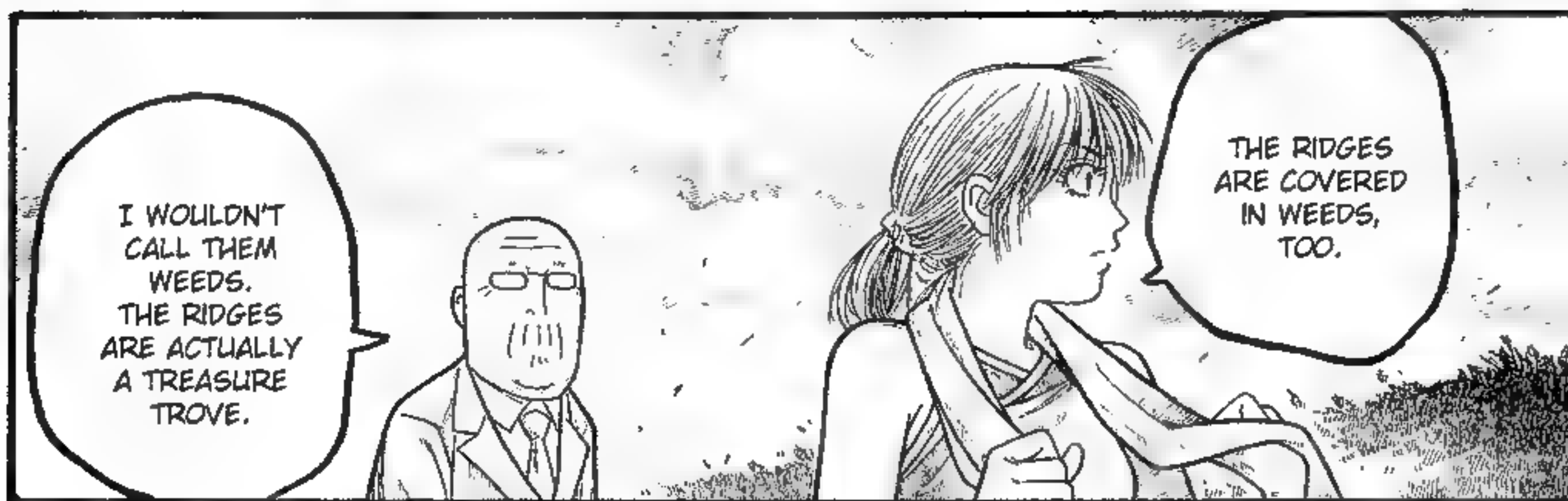
SO THEY'RE
RELYING ON THE
MICROBES IN THE
SOIL TO MAKE IT
MORE FERTILE.



THE PADDIES
YOU GUYS
WERE IN USE
PESTICIDES.

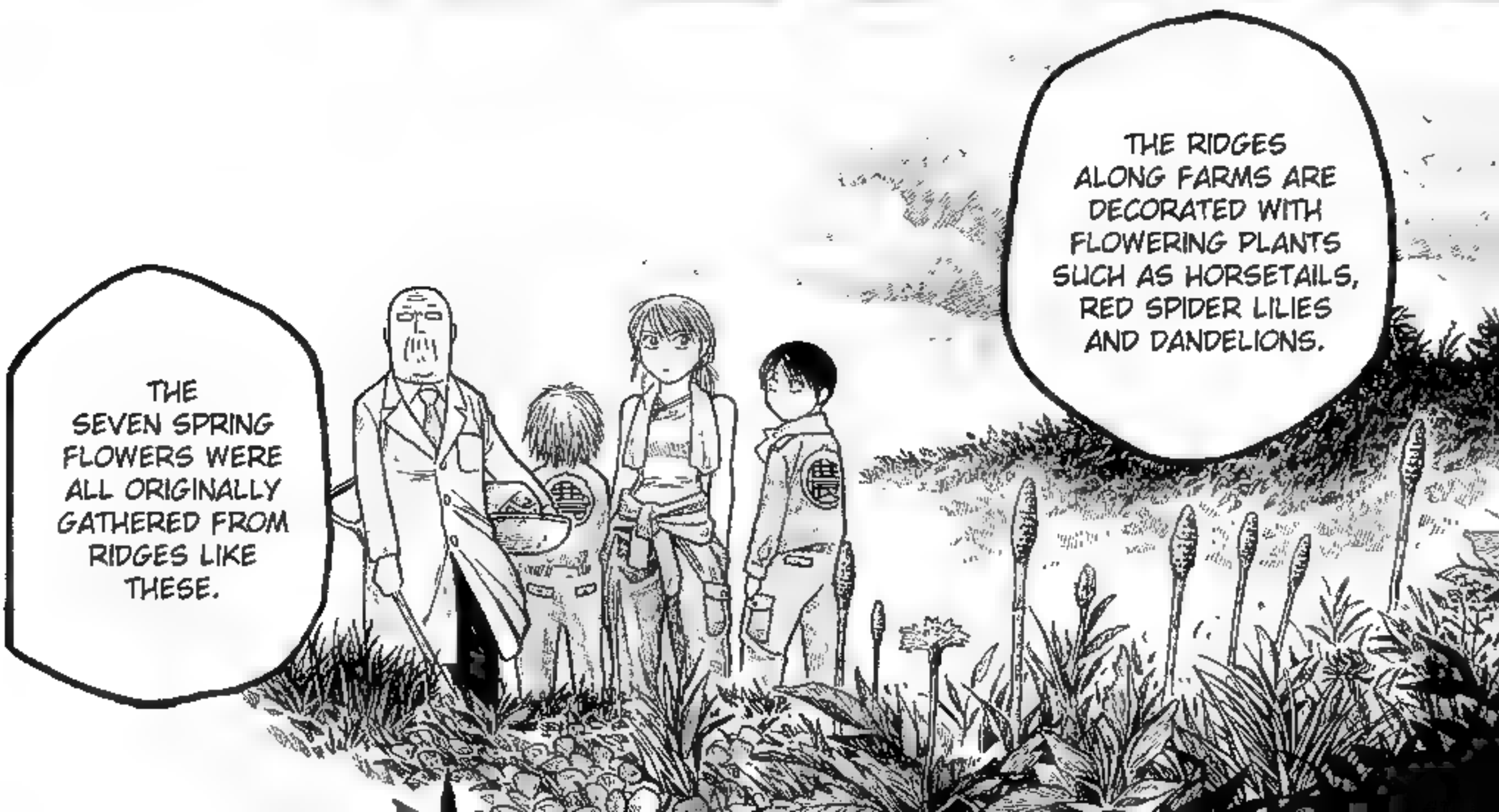
IT'S A
PERFECTLY
CONTROLLED
FIELD THAT CUTS
DOWN ON COSTS
AND THE LABOR
INVOLVED WITH
CUTTING THE
GRASS.

Ke'zou
Itsuki
He's a
professor
at a certain
agricultural
university
He bowed his
head for the
first time last
chapter Well,
bowing is
free, after all



I WOULDN'T
CALL THEM
WEEDS.
THE RIDGES
ARE ACTUALLY
A TREASURE
TROVE.

THE RIDGES
ARE COVERED
IN WEEDS,
TOO.

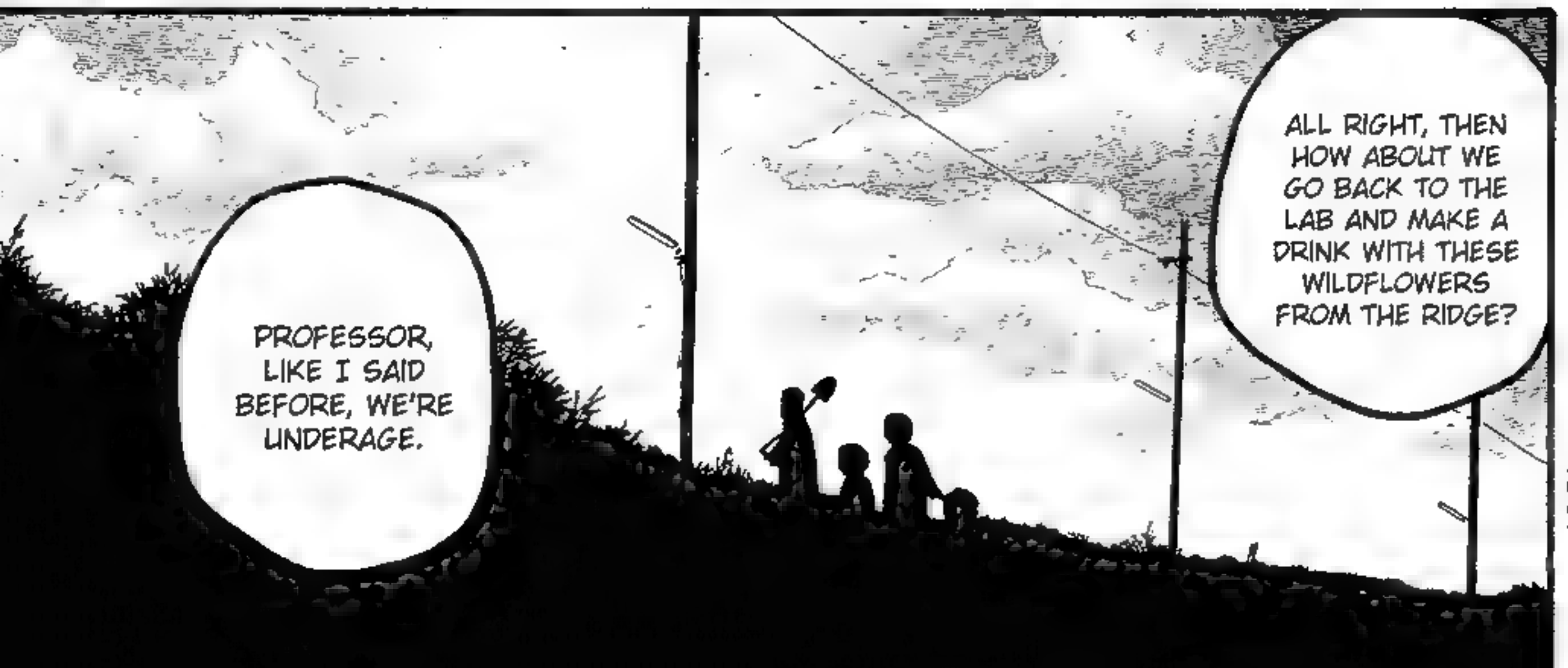
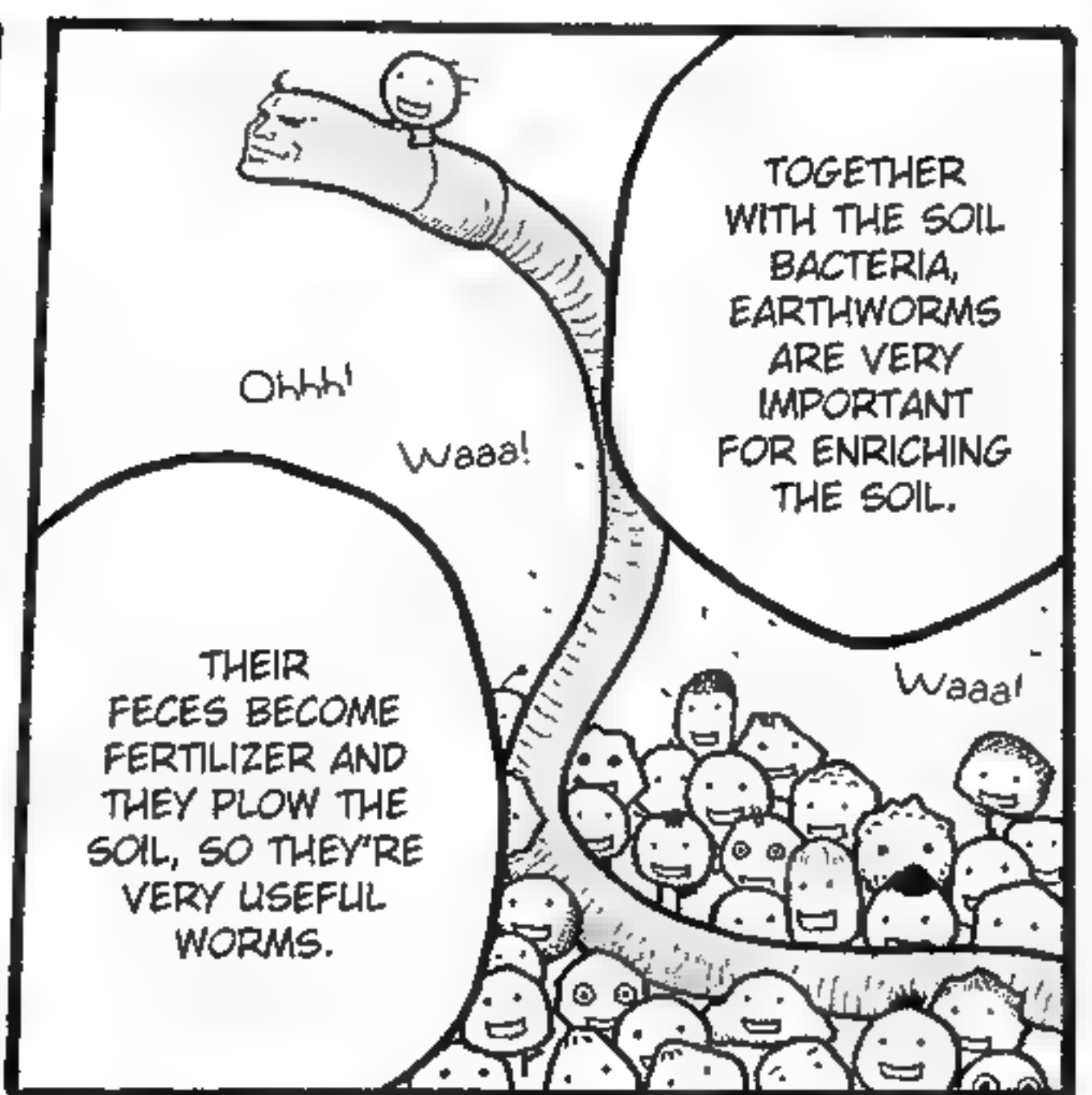
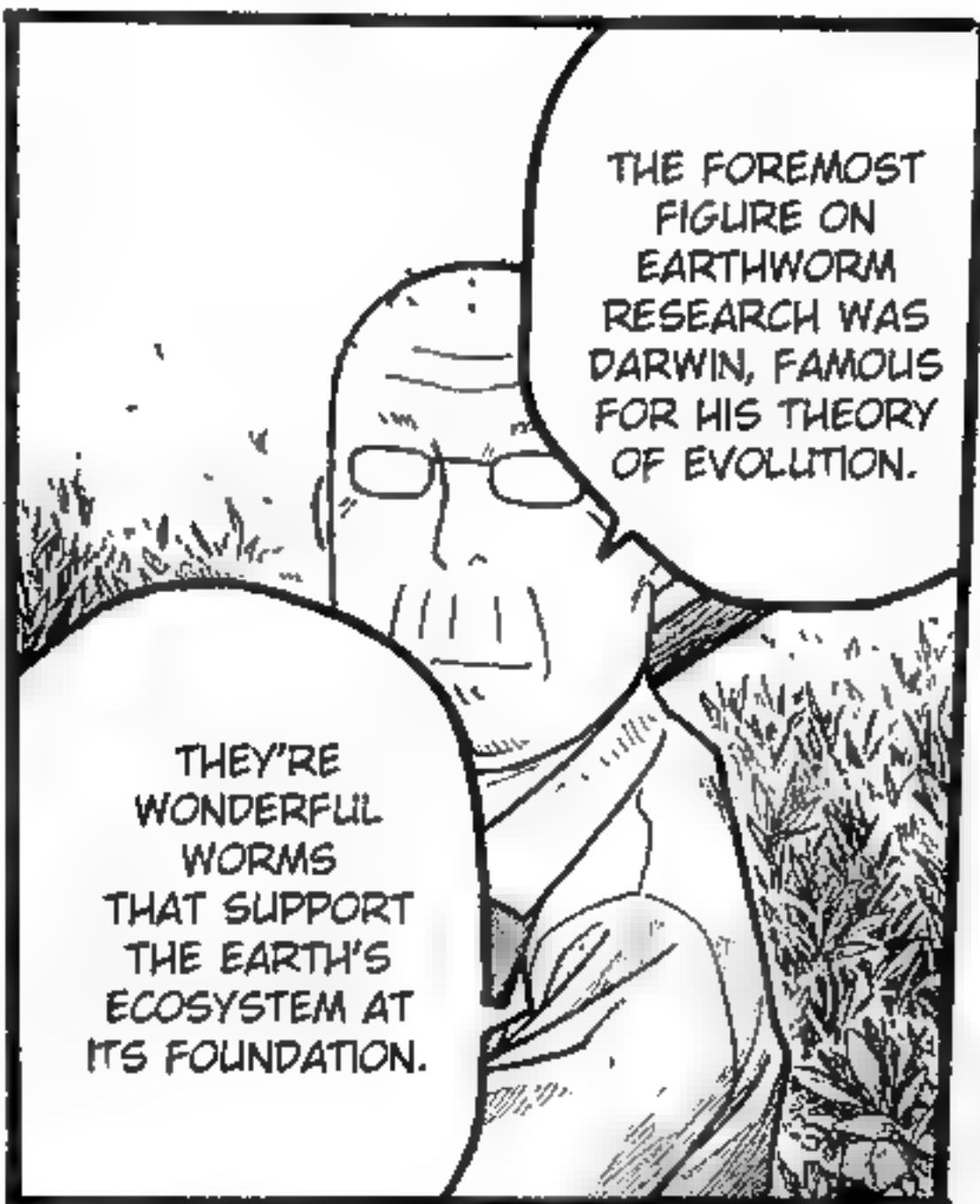


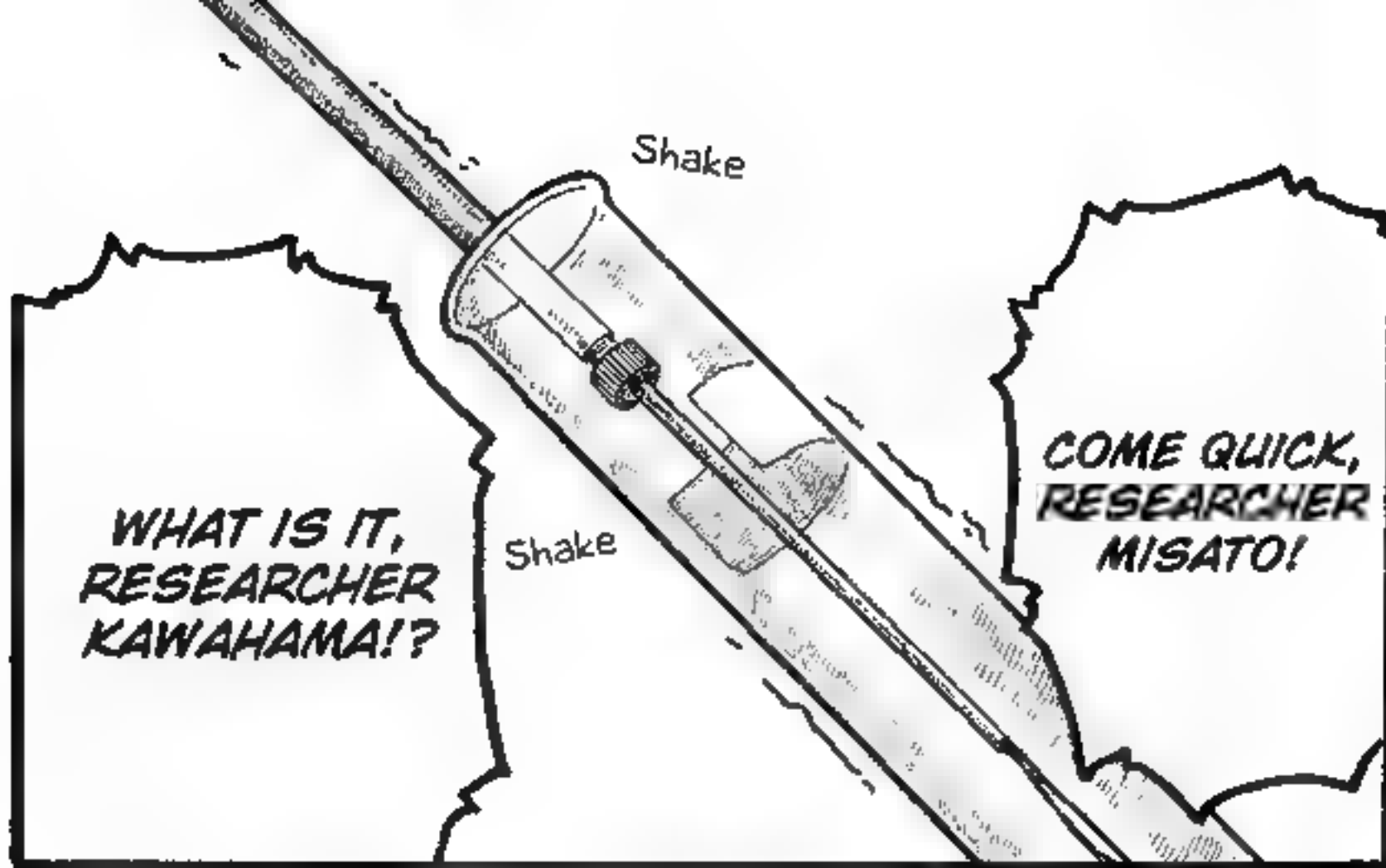
THE
SEVEN SPRING
FLOWERS WERE
ALL ORIGINALLY
GATHERED FROM
RIDGES LIKE
THESE.

THE RIDGES
ALONG FARMS ARE
DECORATED WITH
FLOWERING PLANTS
SUCH AS HORSETAILS,
RED SPIDER LILIES
AND DANDELIONS.



C.
botul'num
It's found throughout nature, including in the soil. It hates the air, and it's covered in spores. It produces the world's strongest toxin that could destroy humanity with just 25 grams if it gets serious. It's the bacteria that causes botulism.

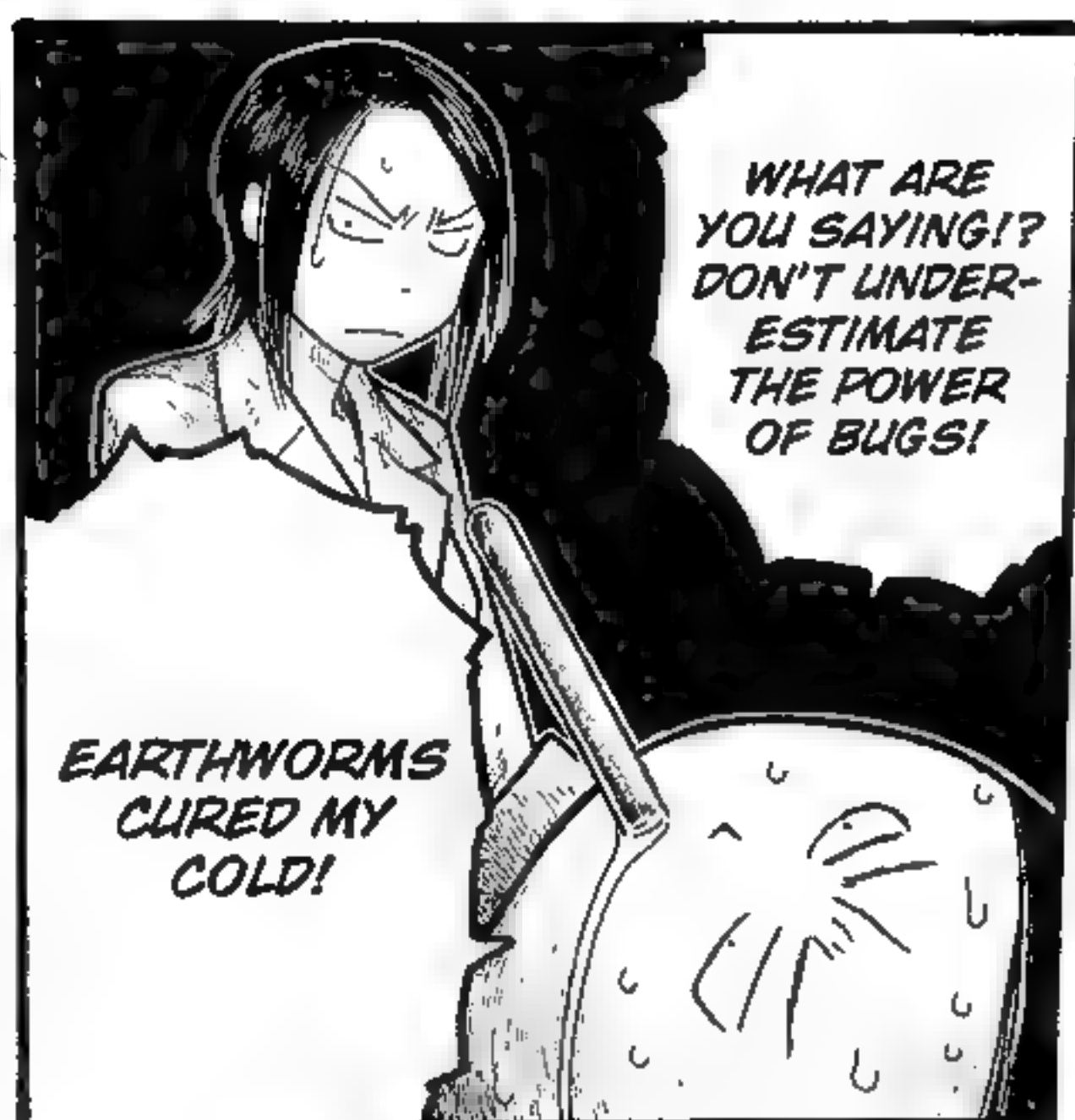






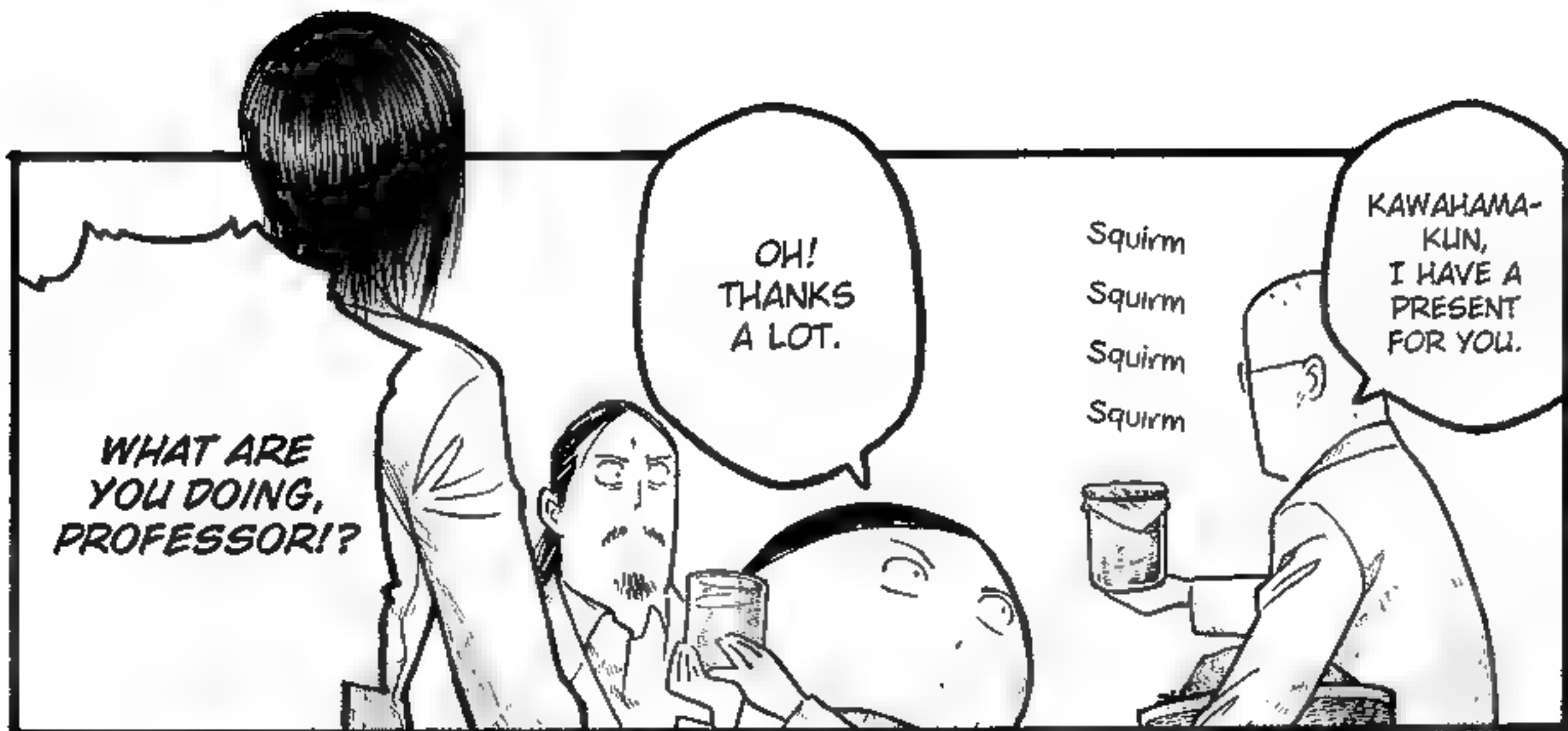
Haruka Hasegawa

She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She really hates Misato and Kawahama.



Earthworms
In Chinese herbology, they're known as "Earth Dragons" and are highly prized. My editor ate them deep-fried in Vietnam, but they were tasteless.



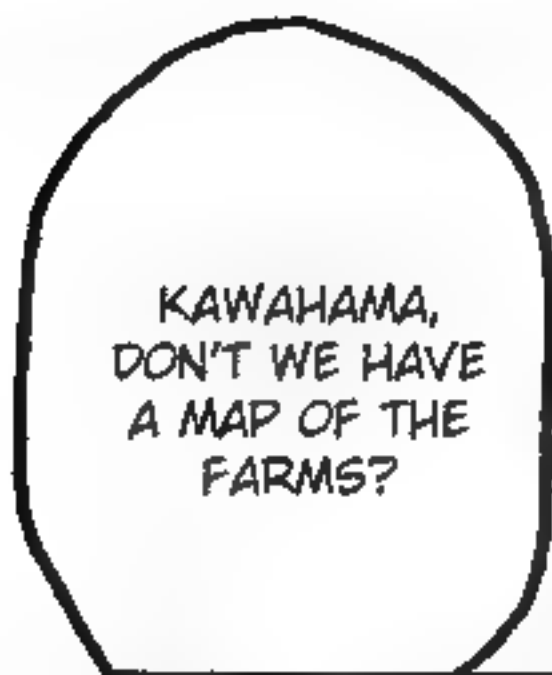


Kaoru Misato
He's a second-year. He failed at homebrewing sake and now he has a large debt. He doesn't show up much in this chapter.



Takuma Kawahama
He's a second-year. He's in debt along with M sato. He showcases his trivial knowledge again in this chapter.

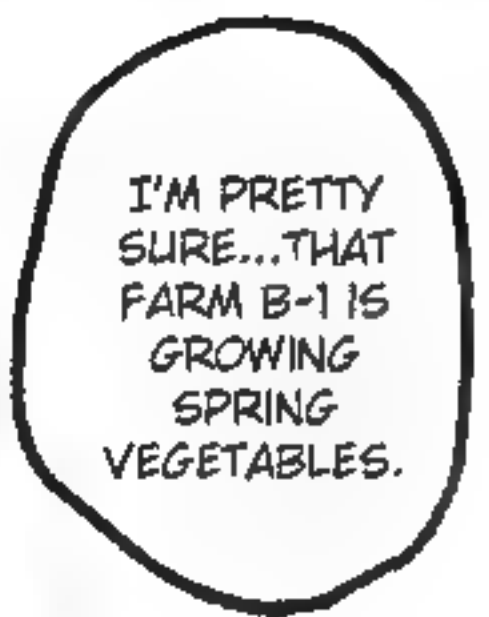




KAWAHAMA,
DON'T WE HAVE
A MAP OF THE
FARMS?

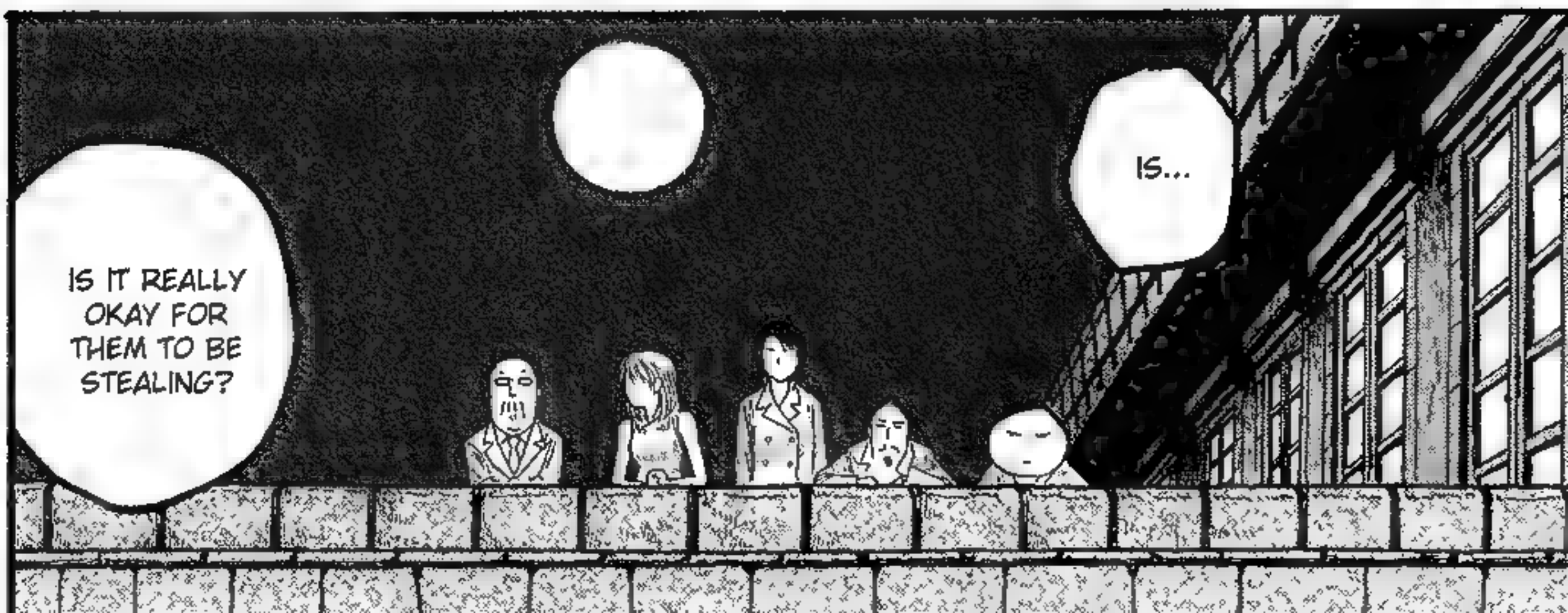
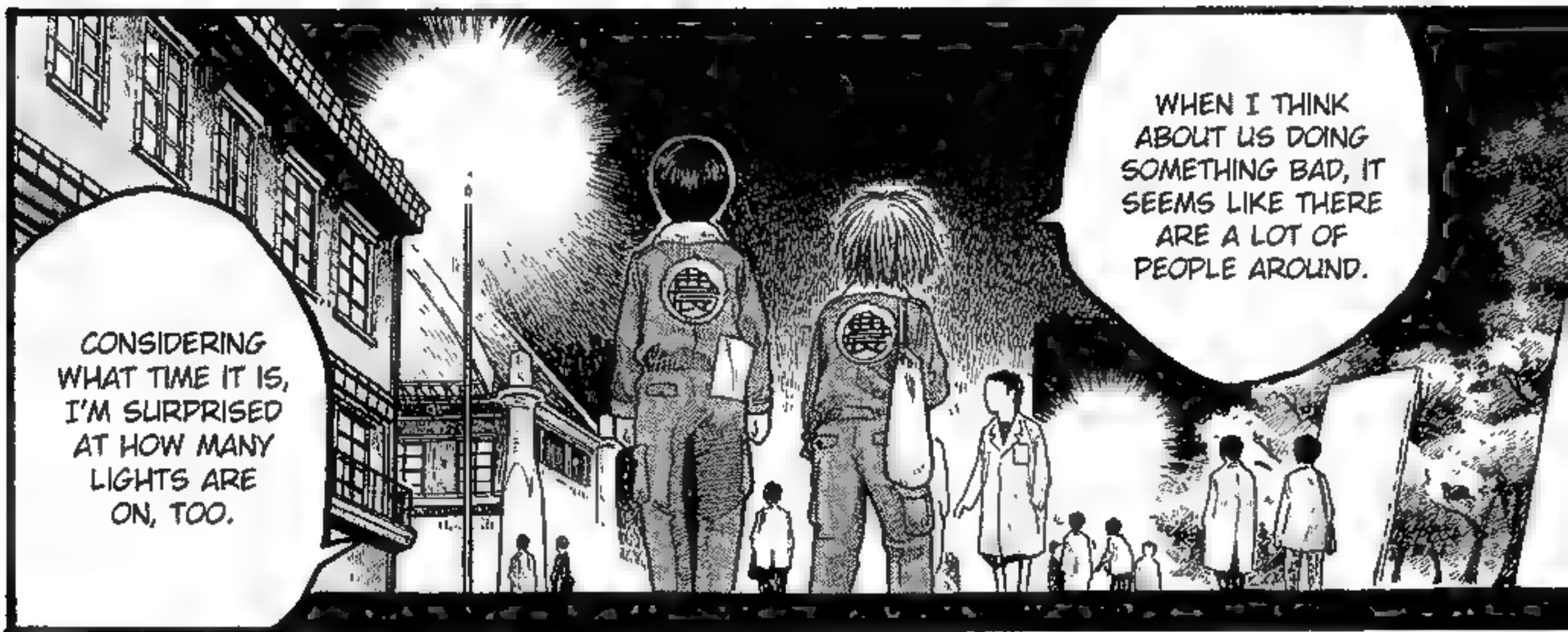


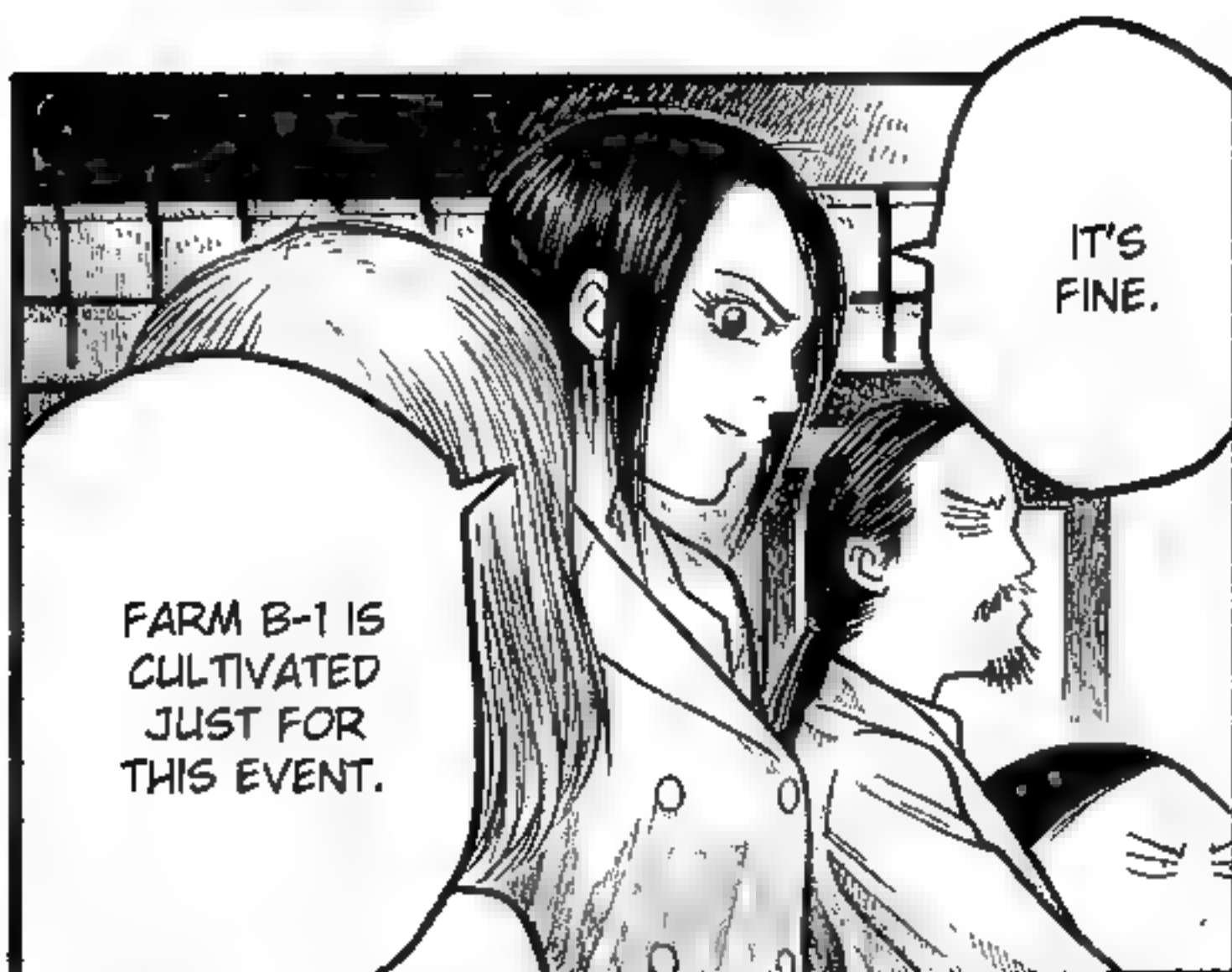
ASPARAGUS
WOULD BE
NICE TO
HAVE IN THE
SPRING.



I'M PRETTY
SURE...THAT
FARM B-1 IS
GROWING
SPRING
VEGETABLES.









A BUNCH OF FIRST-YEARS FROM VARIOUS CLUBS WERE AT FARM B-1.

YEAH, I DON'T KNOW WHAT'S GOING ON, BUT THEY TOLD ME TO GO STEAL SOME VEGETABLES ALL OF A SUDDEN.

THE GUYS FROM YOUR CLUB ASKED YOU TO DO IT, TOO?



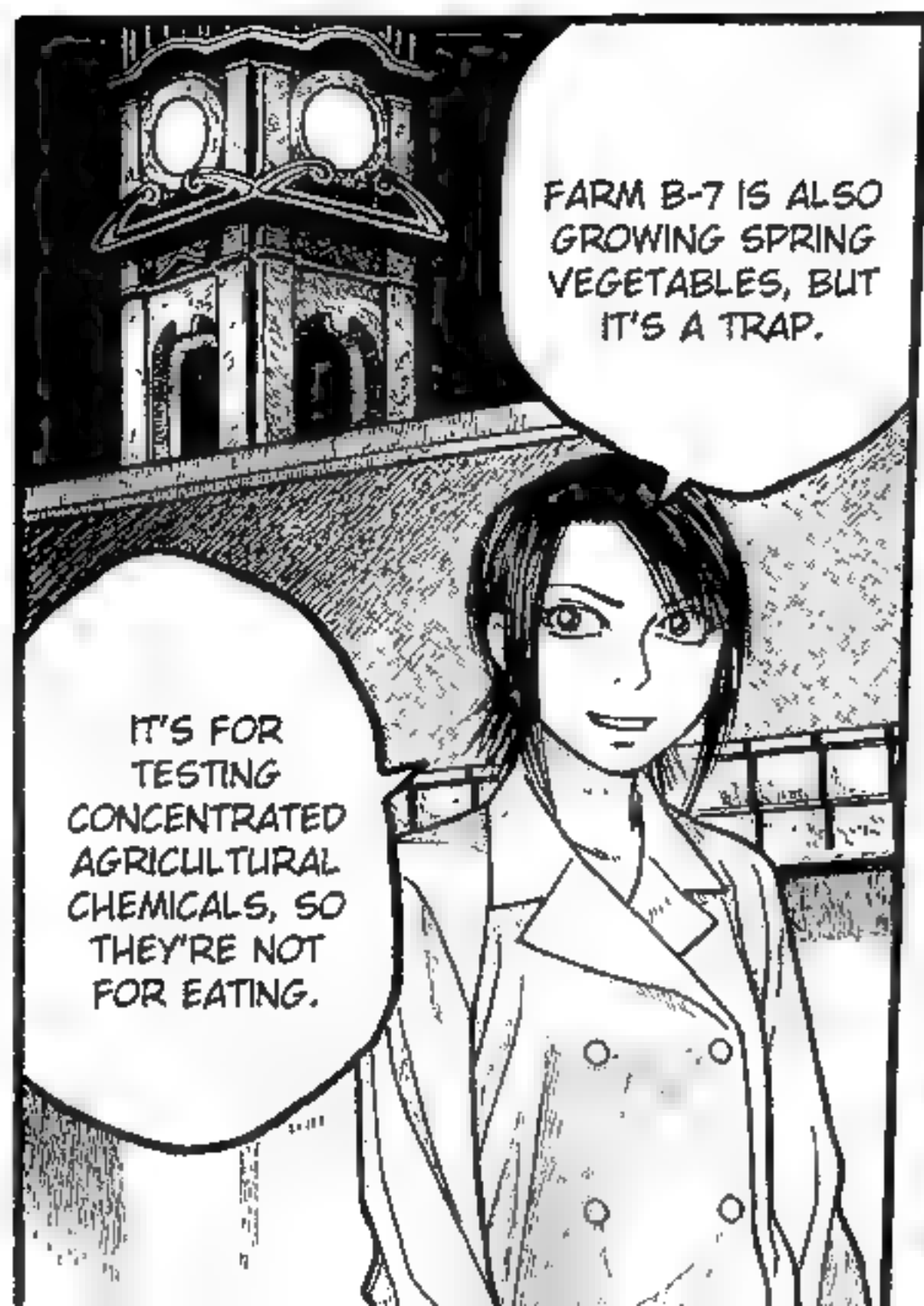
YEAH...I DON'T WANT TO GO ALONG WITH THIS JOKE AND HUMILIATE MYSELF.

IT SEEMS LIKE THIS IS SOME KIND OF SCHOOL-WIDE EVENT.



SAWAKI...

HM?



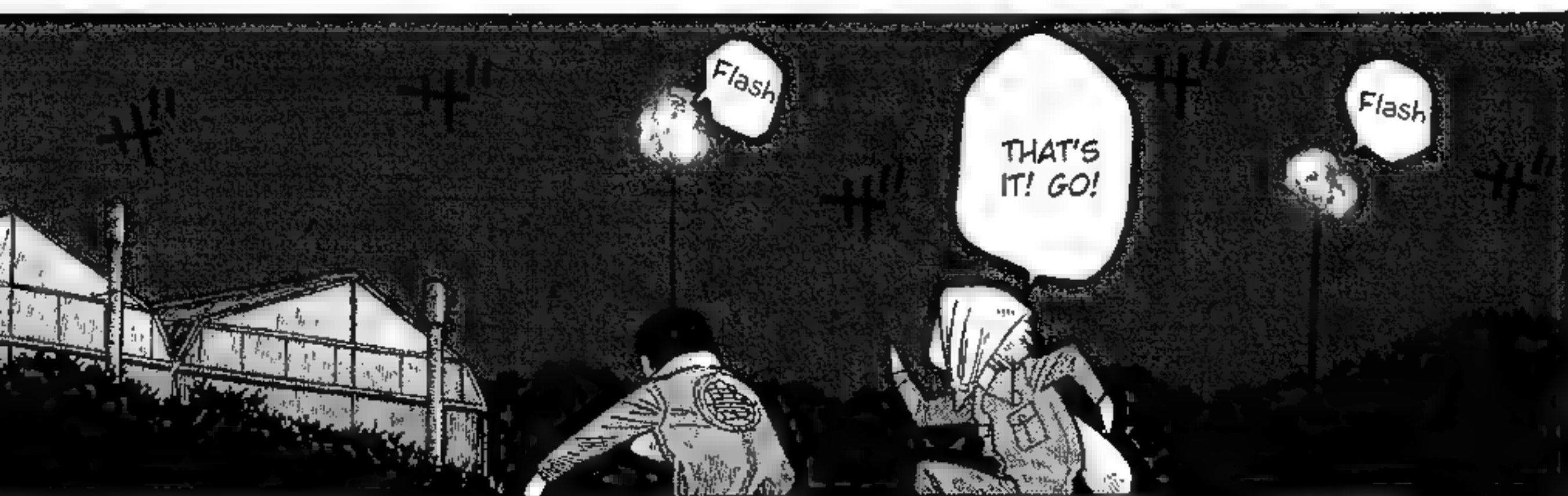
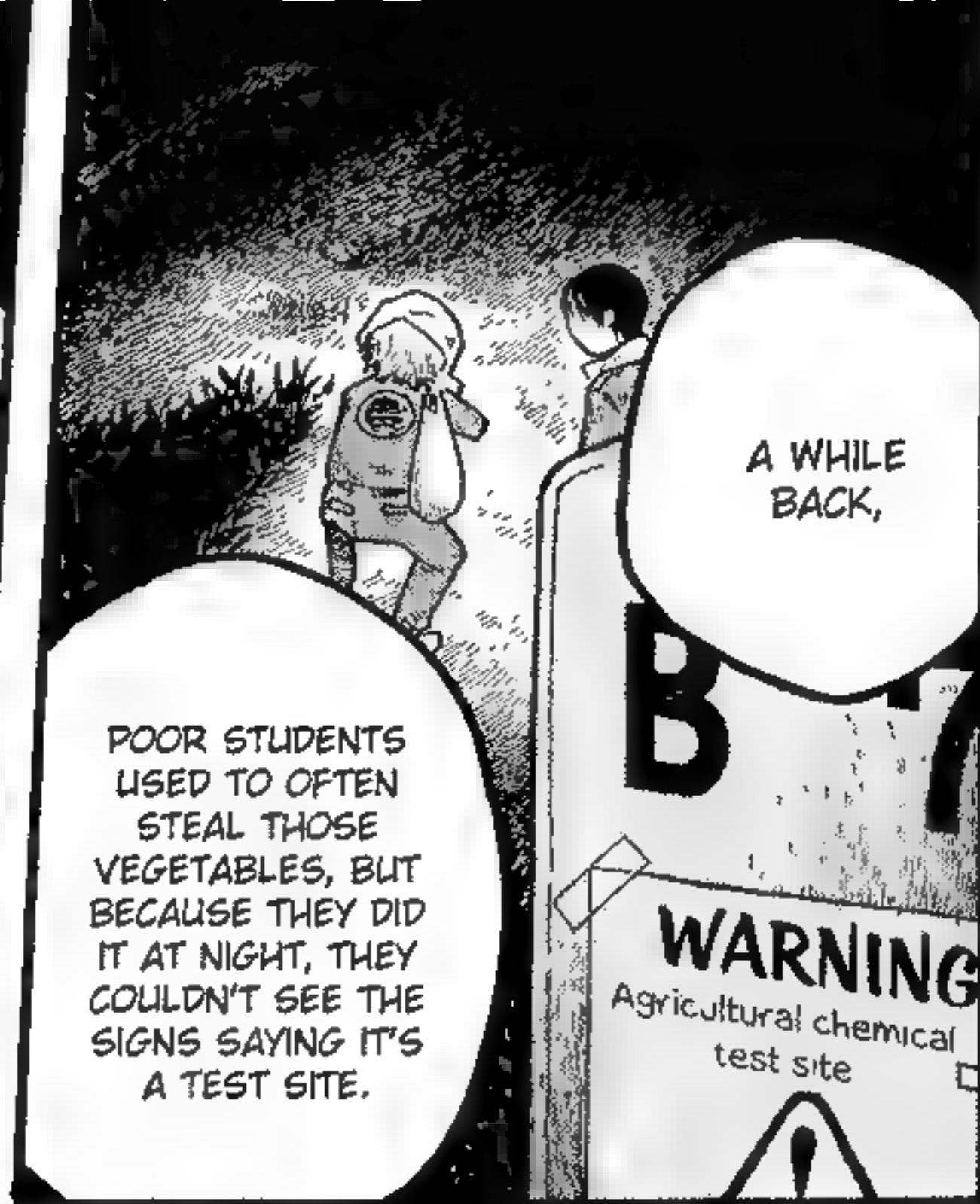
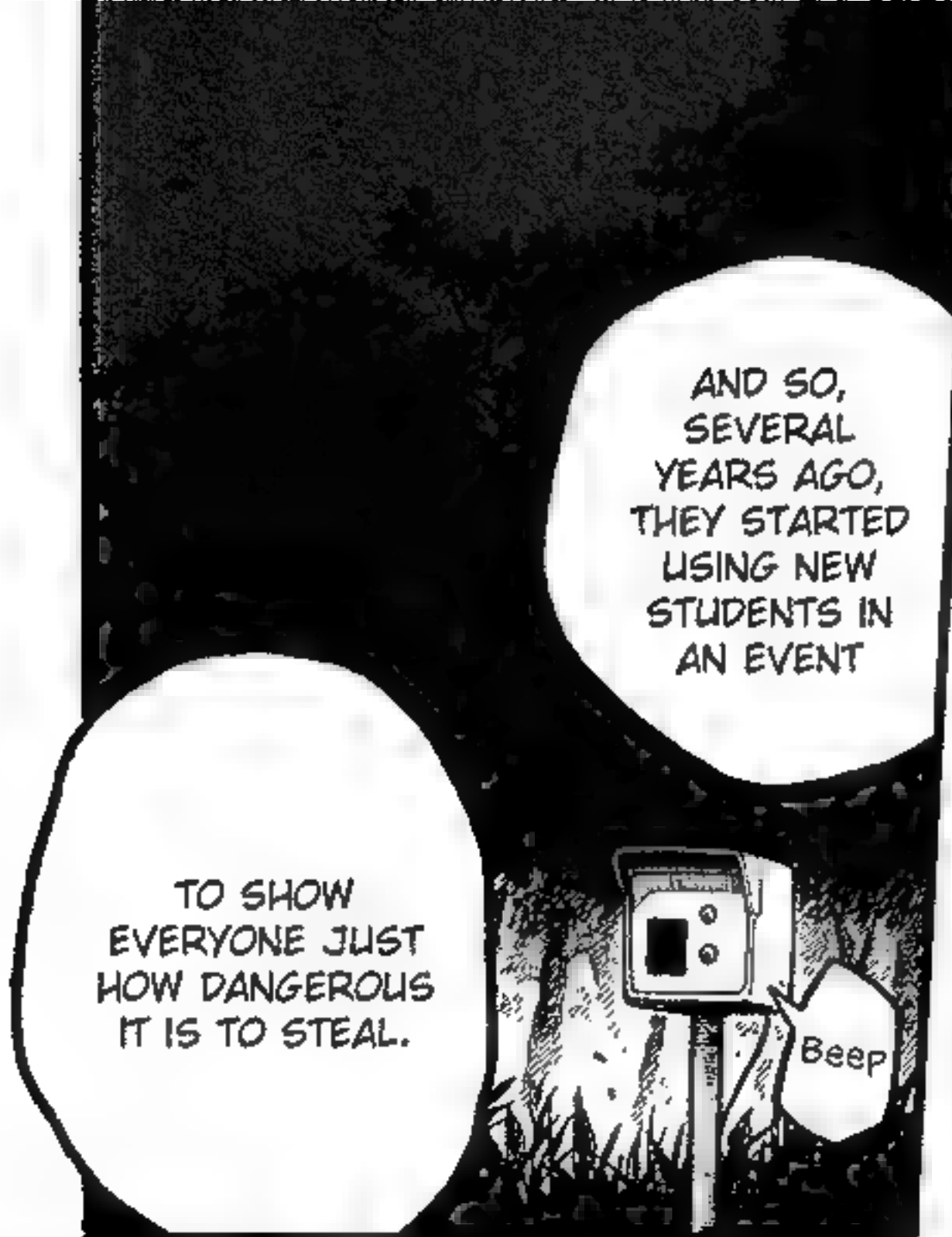
FARM B-7 IS ALSO GROWING SPRING VEGETABLES, BUT IT'S A TRAP.

IT'S FOR TESTING CONCENTRATED AGRICULTURAL CHEMICALS, SO THEY'RE NOT FOR EATING.



LOOK AT THE MAP. FARM B-7 HAS SPRING VEGETABLES, TOO.

YOU'RE RIGHT. THAT FARM'S CLOSER, SO LET'S AIM FOR B-7.





The series will be taking a break next time. so please wait for it!





Hachimitsu Scans

~sweeter than honey~

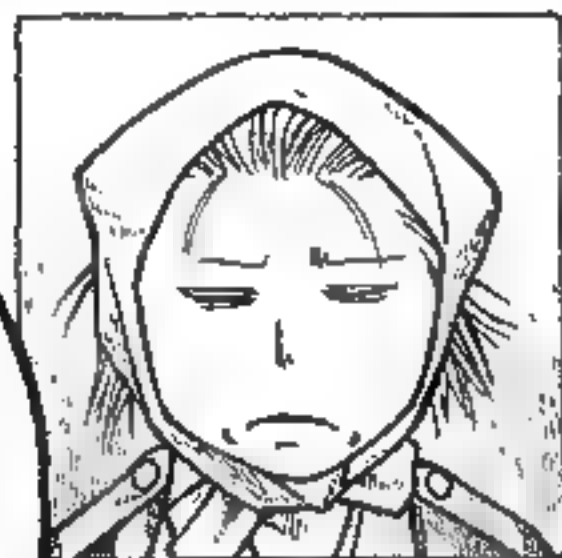
hachimitsu-scans.blogspot.com

PAY ATTENTION TO NOTICES FOR AGRICULTURAL CHEMICAL TEST SITES



There are so many microbes in this chapter: Wheu.

THOSE TWO
ARE PRETTY
FAMOUS NOW.



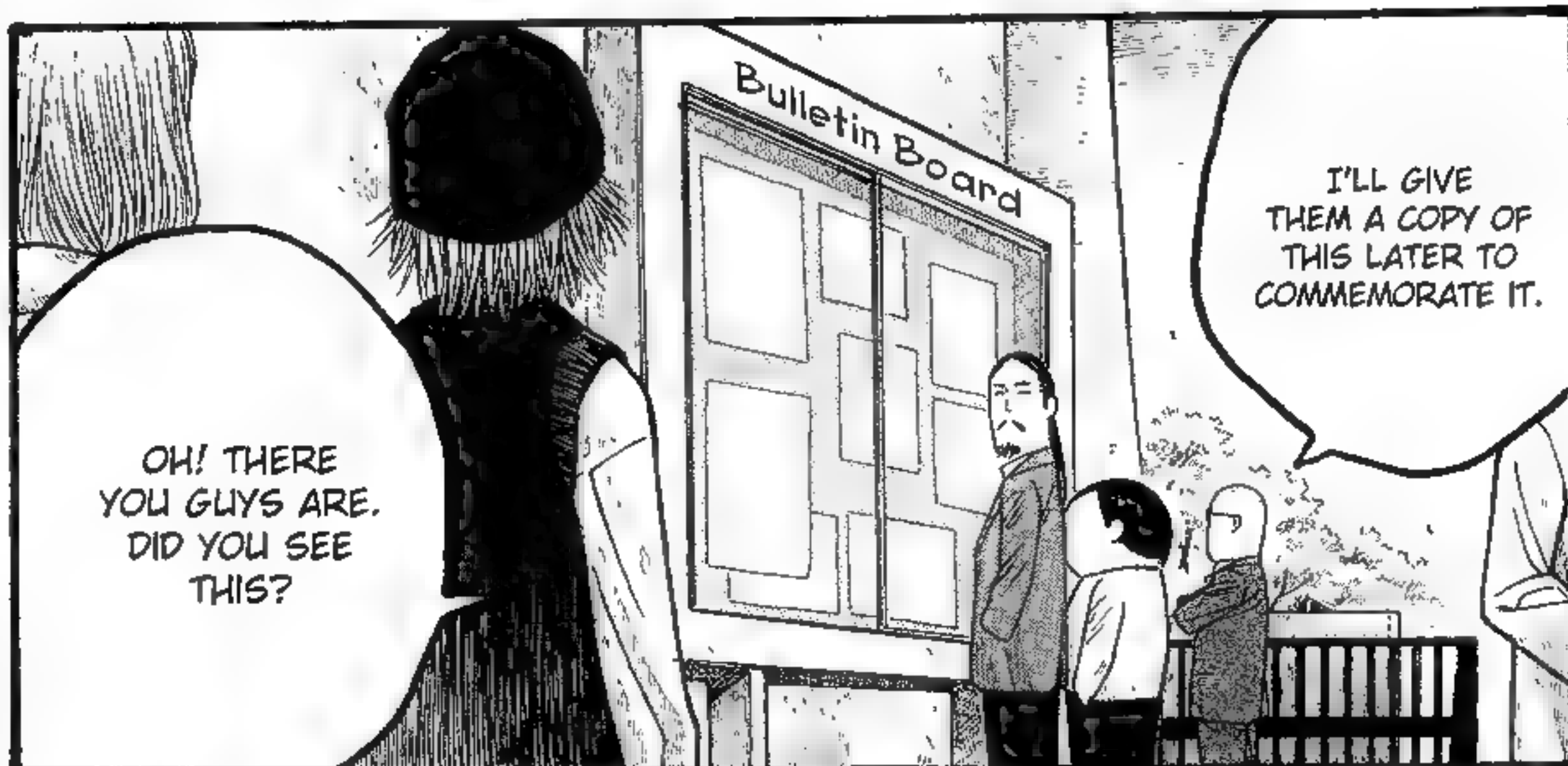
Agricultural
science department
first-year
Tadayasu Sawaki-kun

This
year's
culprits



Agricultural
science department
first-year
Kei Yuuki-kun

OHHH...



OH! THERE
YOU GUYS ARE.
DID YOU SEE
THIS?

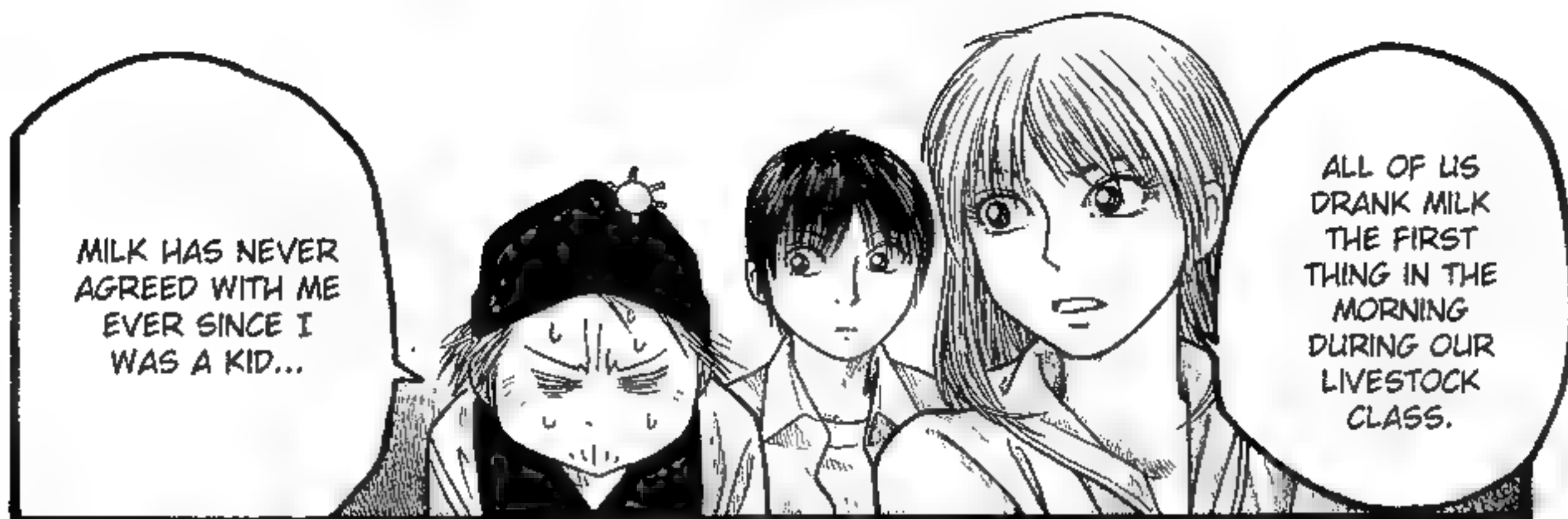
I'LL GIVE
THEM A COPY OF
THIS LATER TO
COMMEMORATE IT.



WHAT'S
WRONG,
SAWAKI?
YOU DON'T
LOOK SO
GOOD.

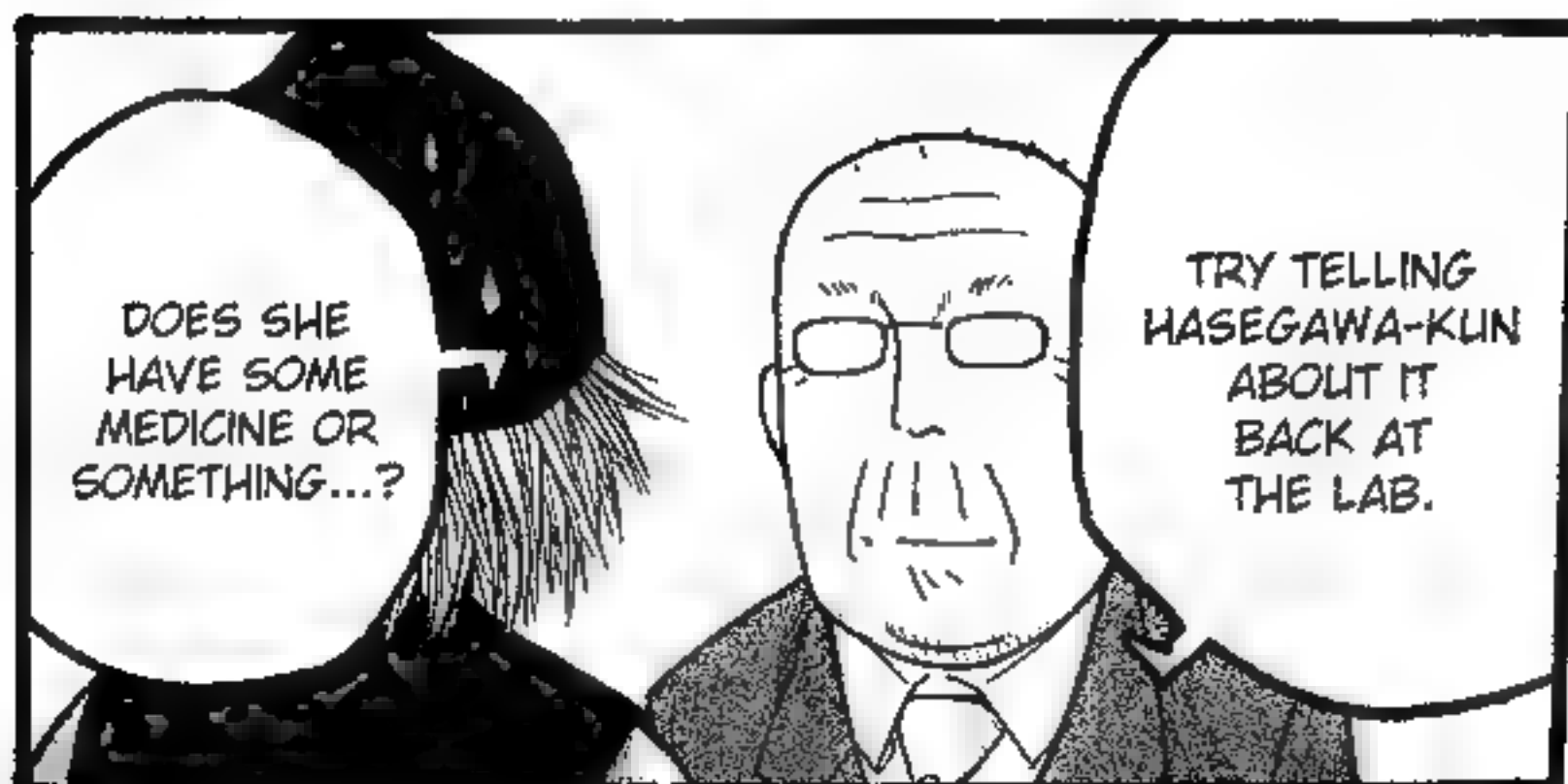
WE DIDN'T
NEED TO.
EVERYONE IN
CLASS TOLD
US ABOUT IT
ALREADY.

WELL...
IT SEEMS
LIKE I'VE GOT
INDIGESTION...



MILK HAS NEVER AGREED WITH ME EVER SINCE I WAS A KID...

ALL OF US DRANK MILK THE FIRST THING IN THE MORNING DURING OUR LIVESTOCK CLASS.



DOES SHE HAVE SOME MEDICINE OR SOMETHING...?

TRY TELLING HASEGAWA-KUN ABOUT IT BACK AT THE LAB.



SHE'S PREPARING SOME THINGS BY HERSELF, SO GIVE HER A HAND.

OIKAWA-KUN, COULD YOU HEAD OVER TO SEE HASEGAWA-KUN, TOO?



YOU MESSED UP YOUR STOMACH BECAUSE OF LIVESTOCK AGAIN?

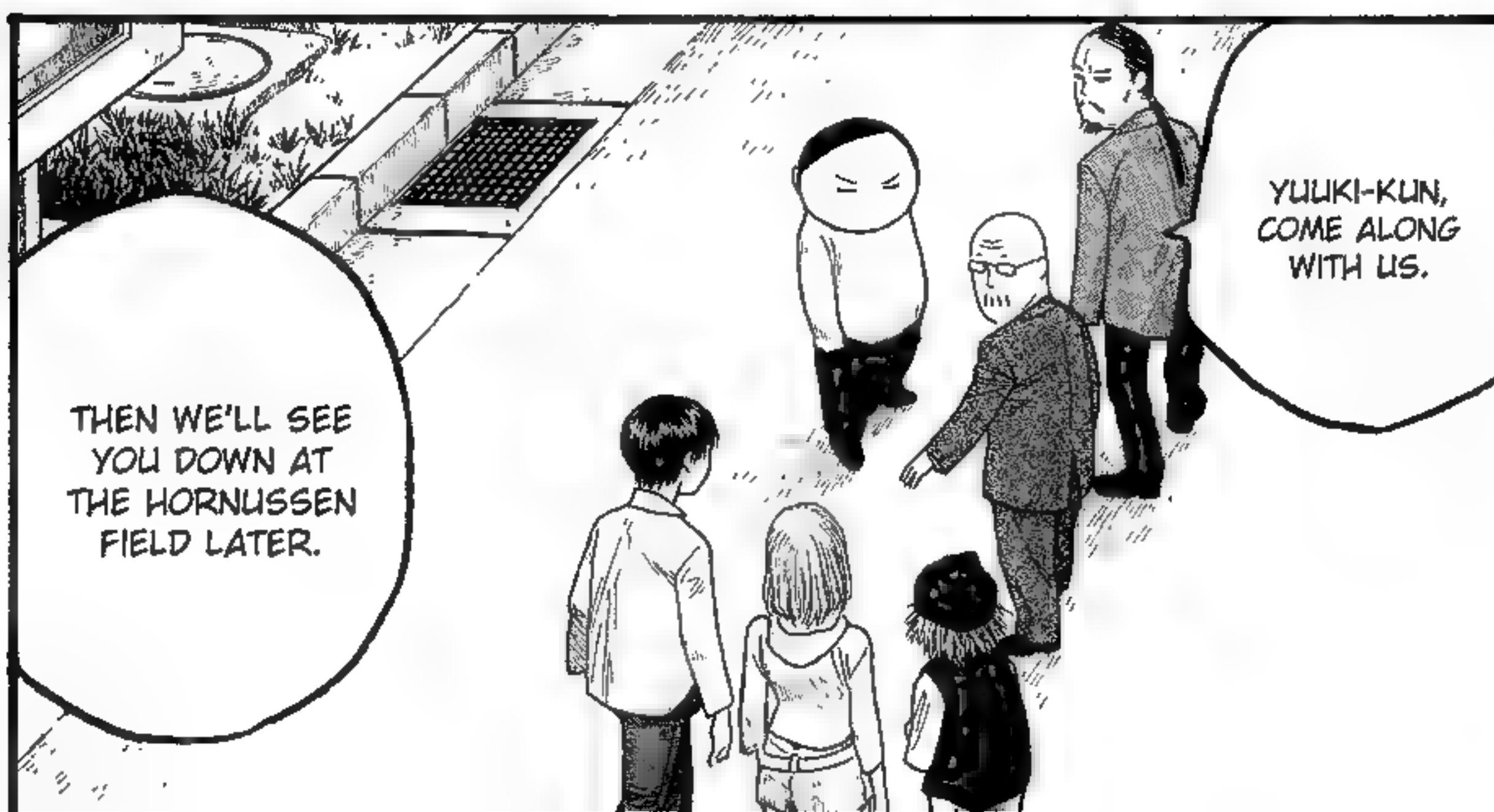
IT KINDA SEEMS LIKE LIVESTOCK ARE GONNA END UP AS A SOURCE OF TRAUMA FOR ME...



Tadayasu Sawaki
He's the main character. For some reason, he can see microbes. He's sort of in the background in this chapter.



Kei Yuuki
He's been Sawaki's friend since they were kids and his parents run a sake brewery. I get asked by readers if he's a girl.



THEN WE'LL SEE YOU DOWN AT THE HORNUSSSEN FIELD LATER.

YUUKI-KUN, COME ALONG WITH US.

The First volume will come out in the spring. Yaaay!

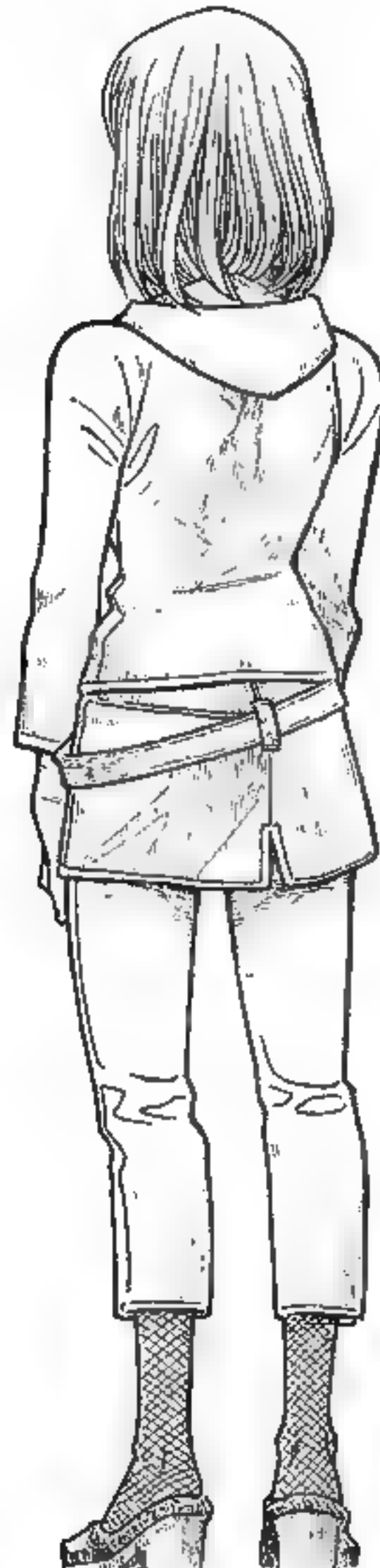
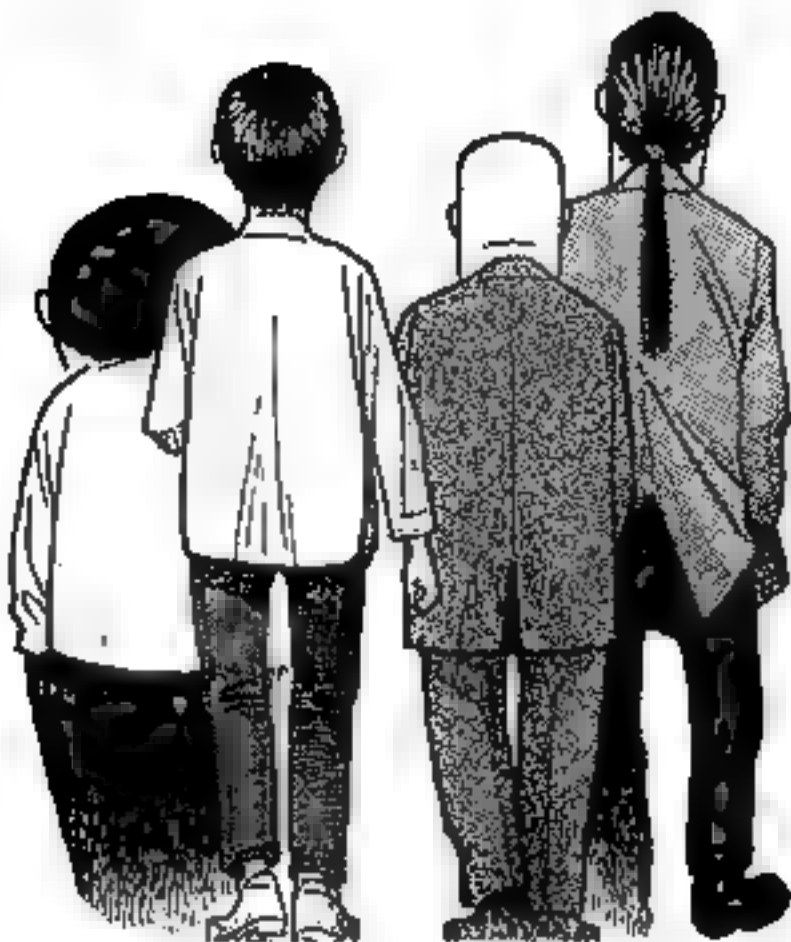
農物語

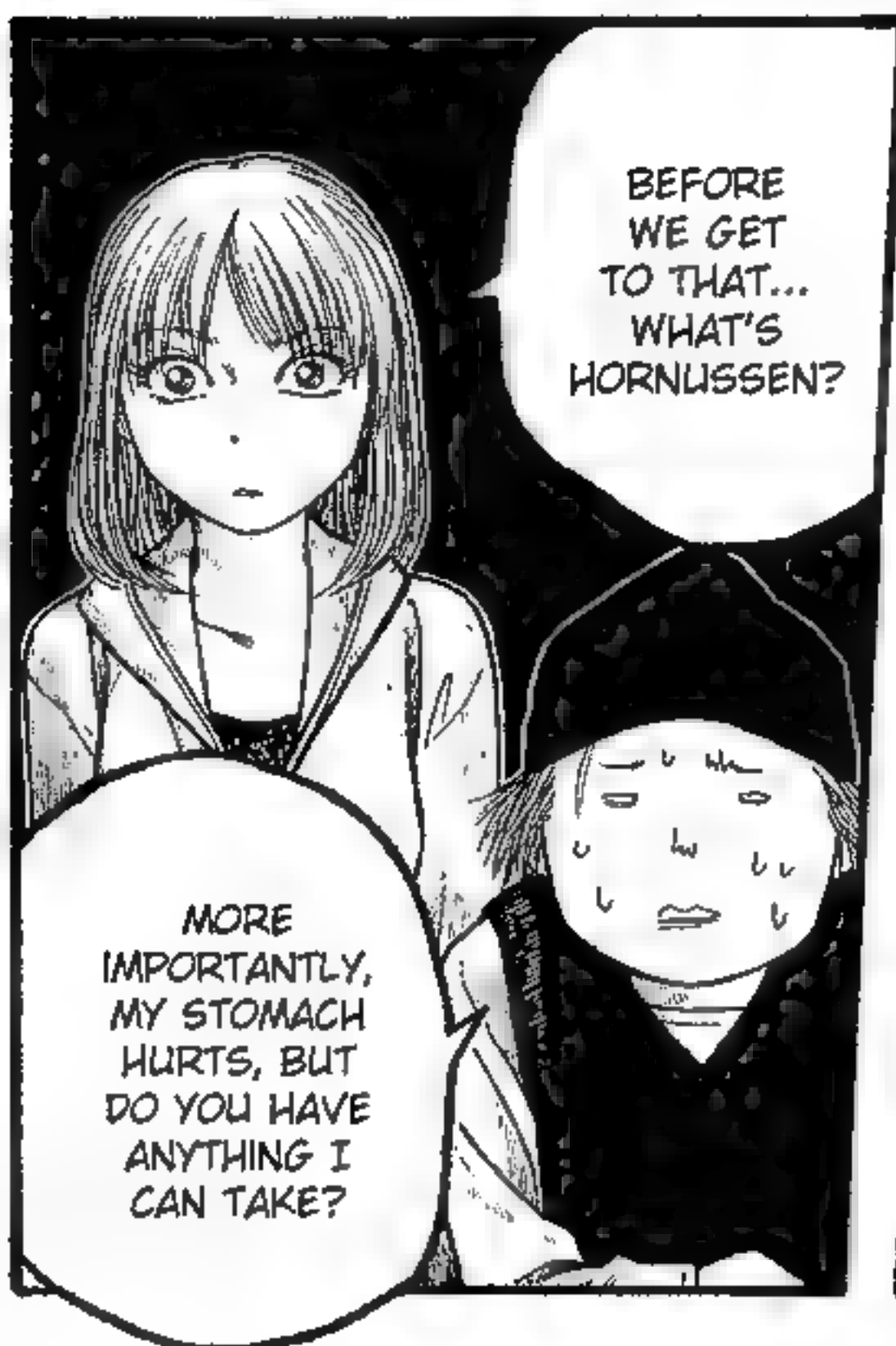
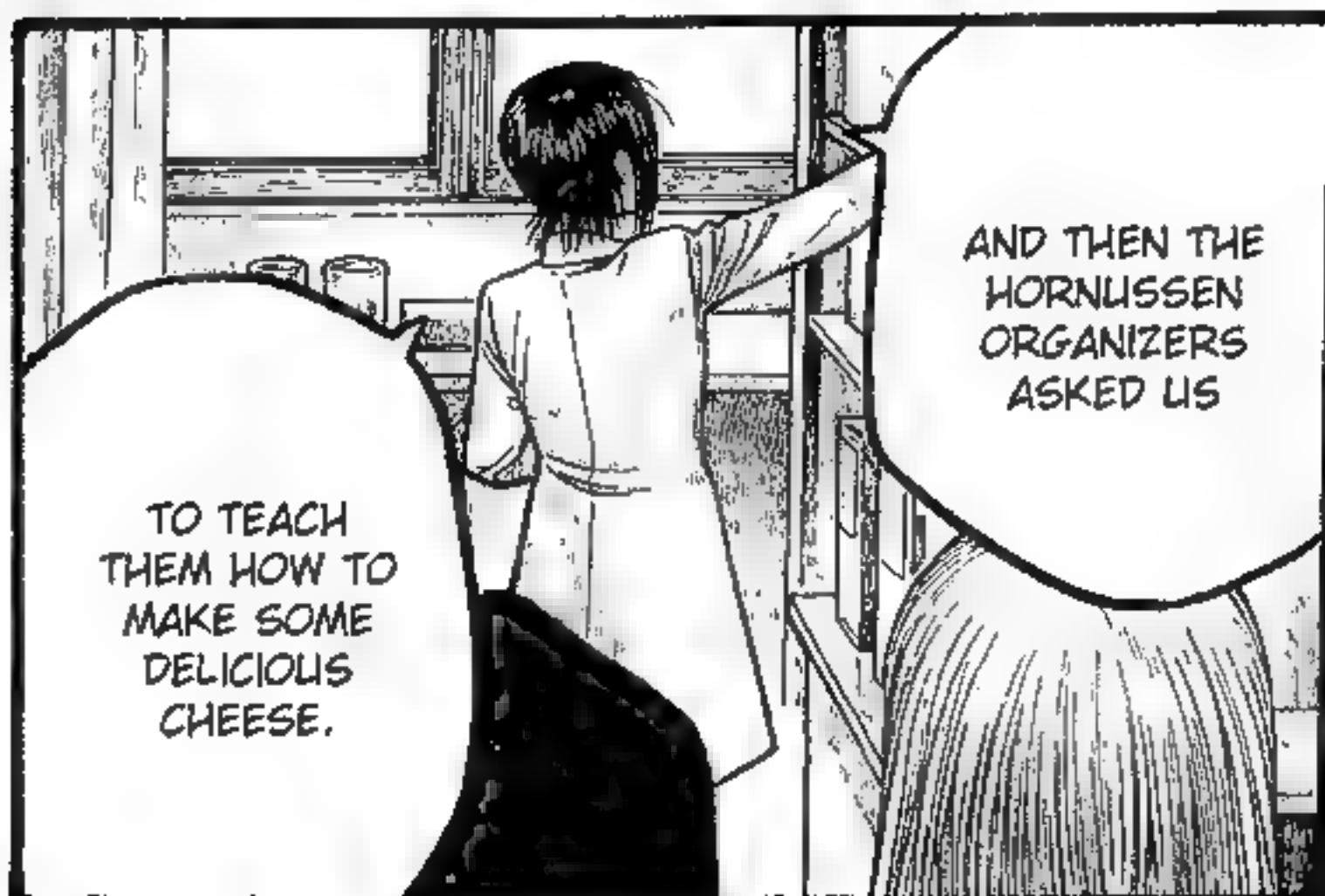
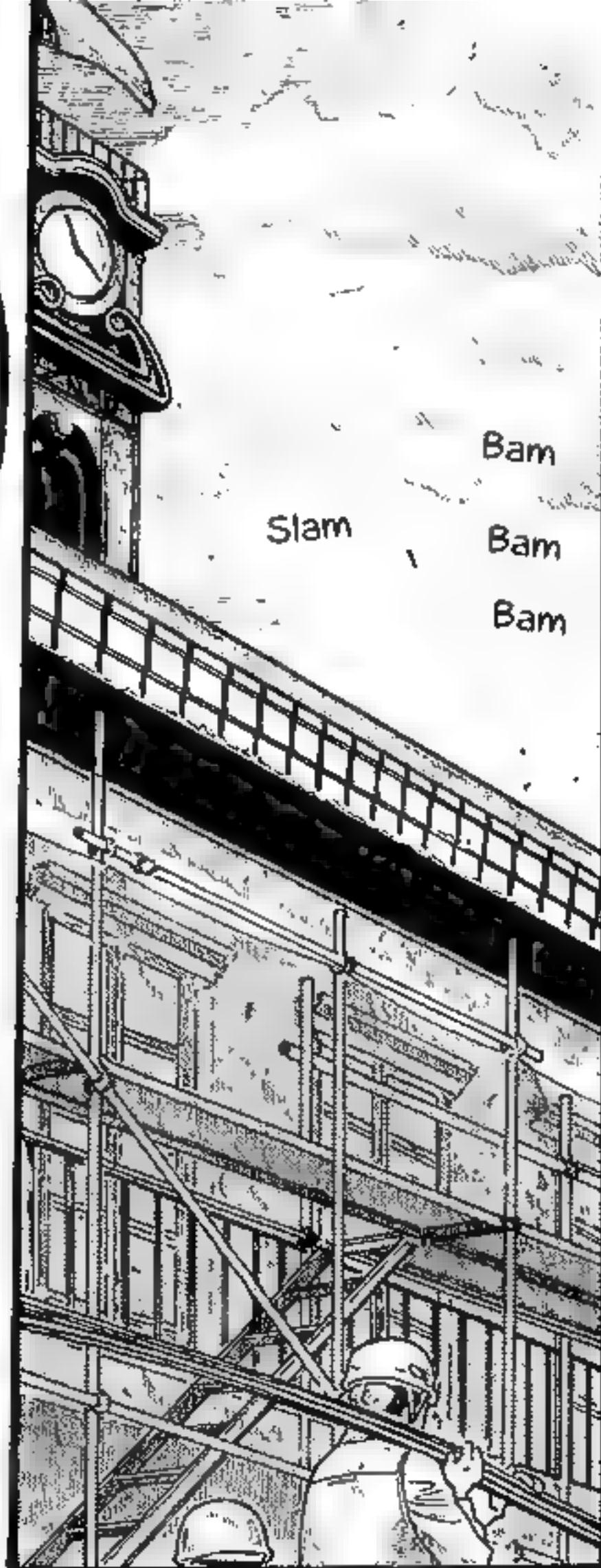
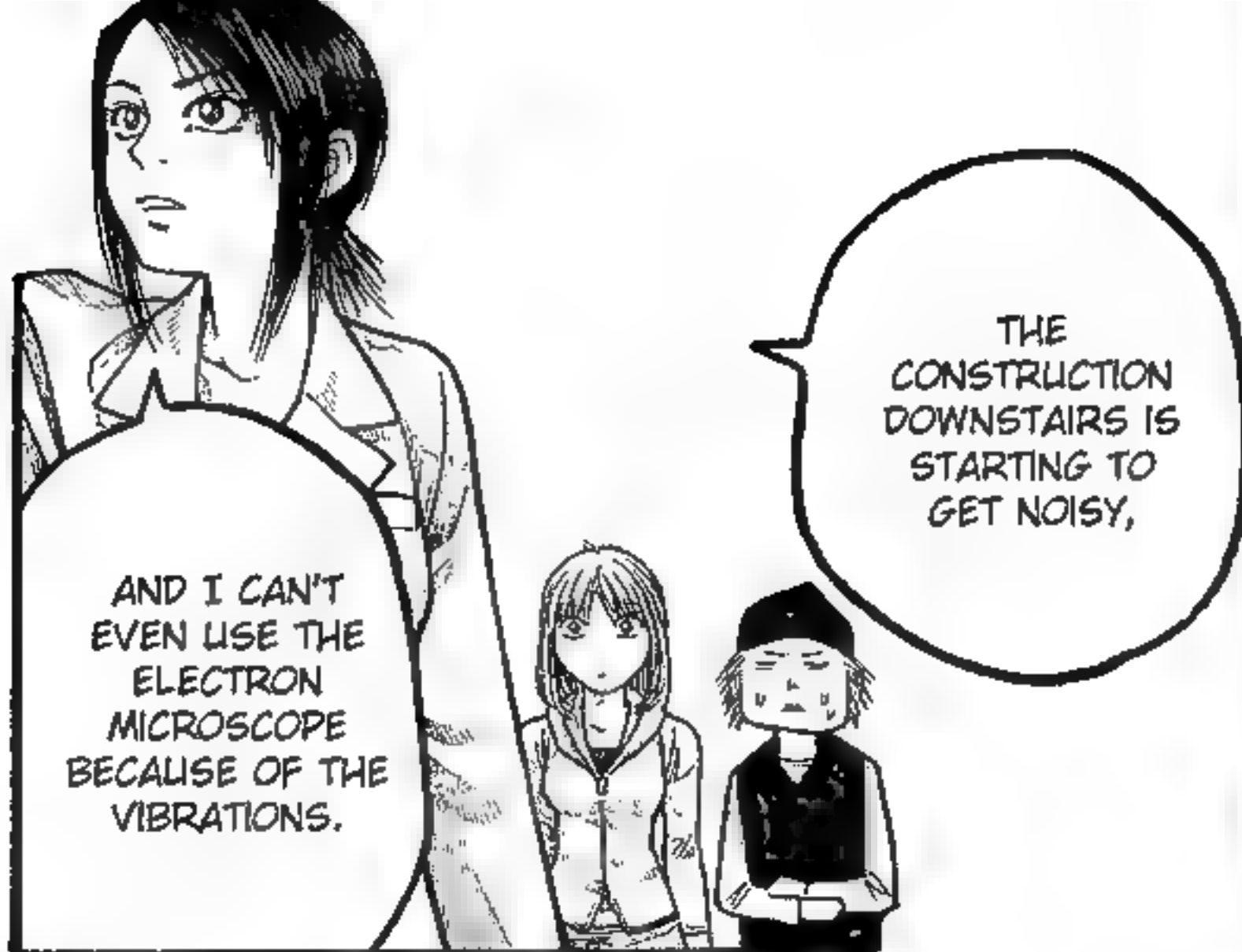
TALES OF AGRICULTURE

CH. 11: BATTLE OF THE GOOD BACTERIA

...WHAT'S
HORNUSSEN?

WHAT'S
HORNUSSEN?







Hazuki Oikawa

Like Sawaki and Yuuki, she's a first-year at the agricultural university. Is she with Sawaki and the others too much?



Haruka Hasegawa

She's a graduate student at a certain agricultural university. She's Professor Itsuki's No. 1 subordinate. She made Yuuki her subordinate.



Keizou Itsuki

He's a professor at a certain agricultural university. I'll show what's under his gillnet someday.



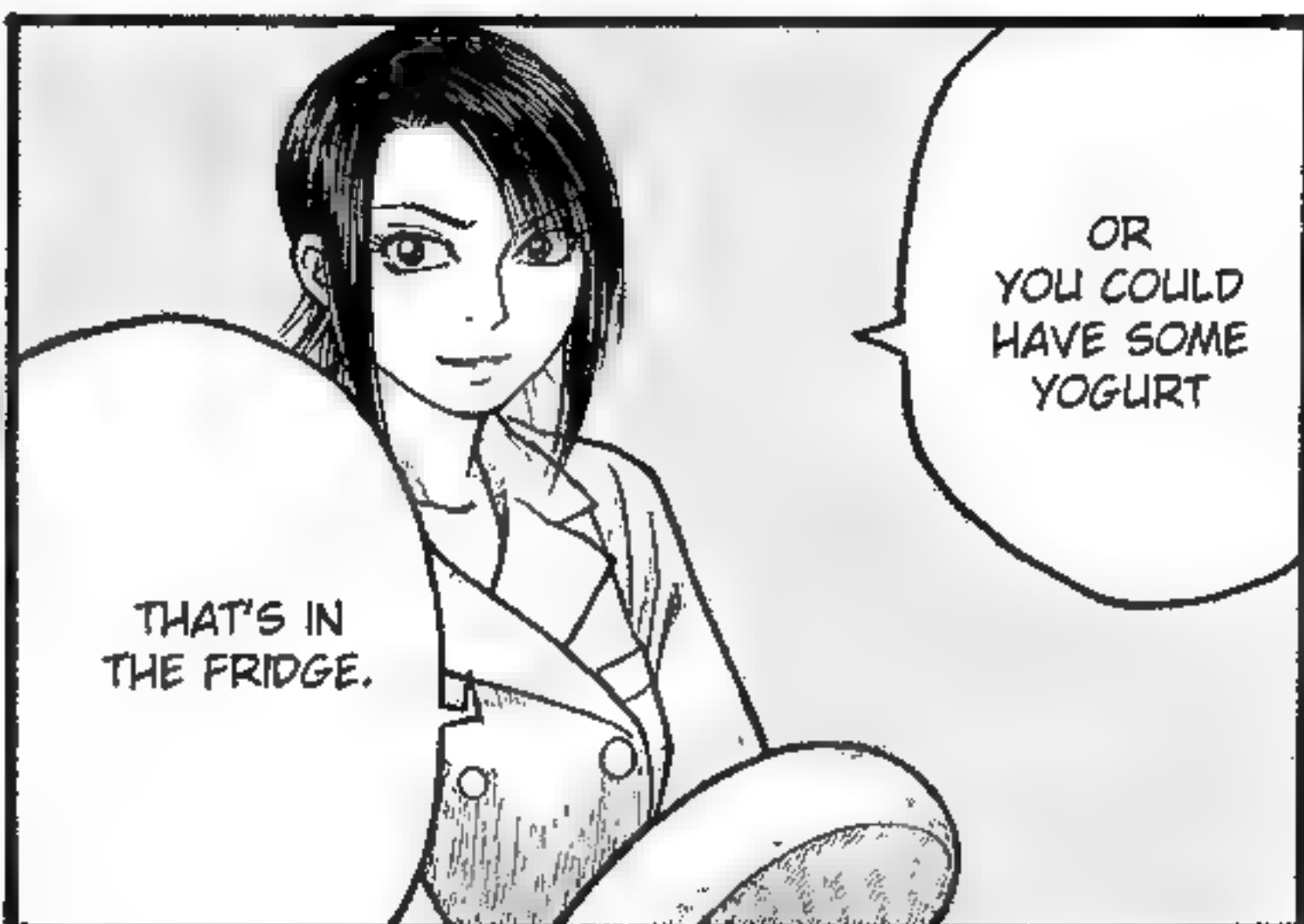
IT'S A LACTIC ACID DRINK MADE HERE AT THE UNIVERSITY. IT'S BASICALLY CALPIS.

WHAT IS IT?



IS IT INDIGESTION?

THEN TRY DRINKING WHAT I HAVE OVER THERE.



THAT'S IN THE FRIDGE.

OR YOU COULD HAVE SOME YOGURT



MILK MADE HIM GET LIKE THIS, SO WOULDN'T YOGURT MAKE HIM WORSE?

WAIT A SECOND...



DON'T UNDERESTIMATE LACTIC ACID BACTERIA.

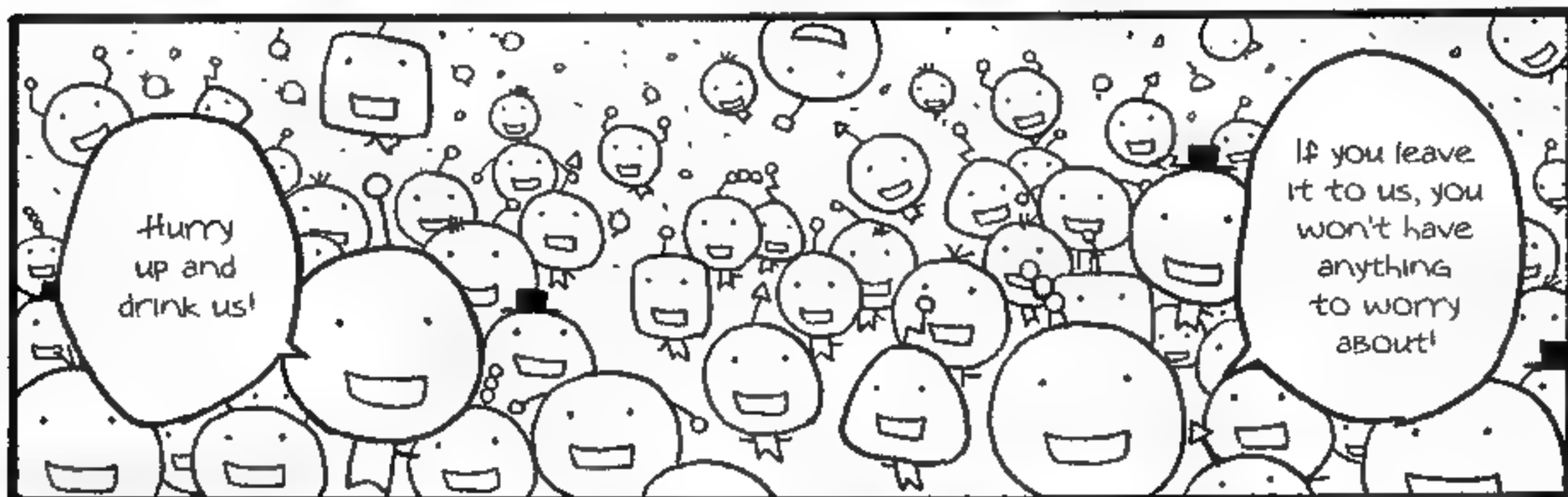
WHAT ARE YOU SAYING?



L. lactis
It's a pro in the treatment of milk



L. cremor's
It's actually spherical in shape. It's well-known from Caspian Sea yogurt.



L. casei
It has the ability to activate killer T cells in your body



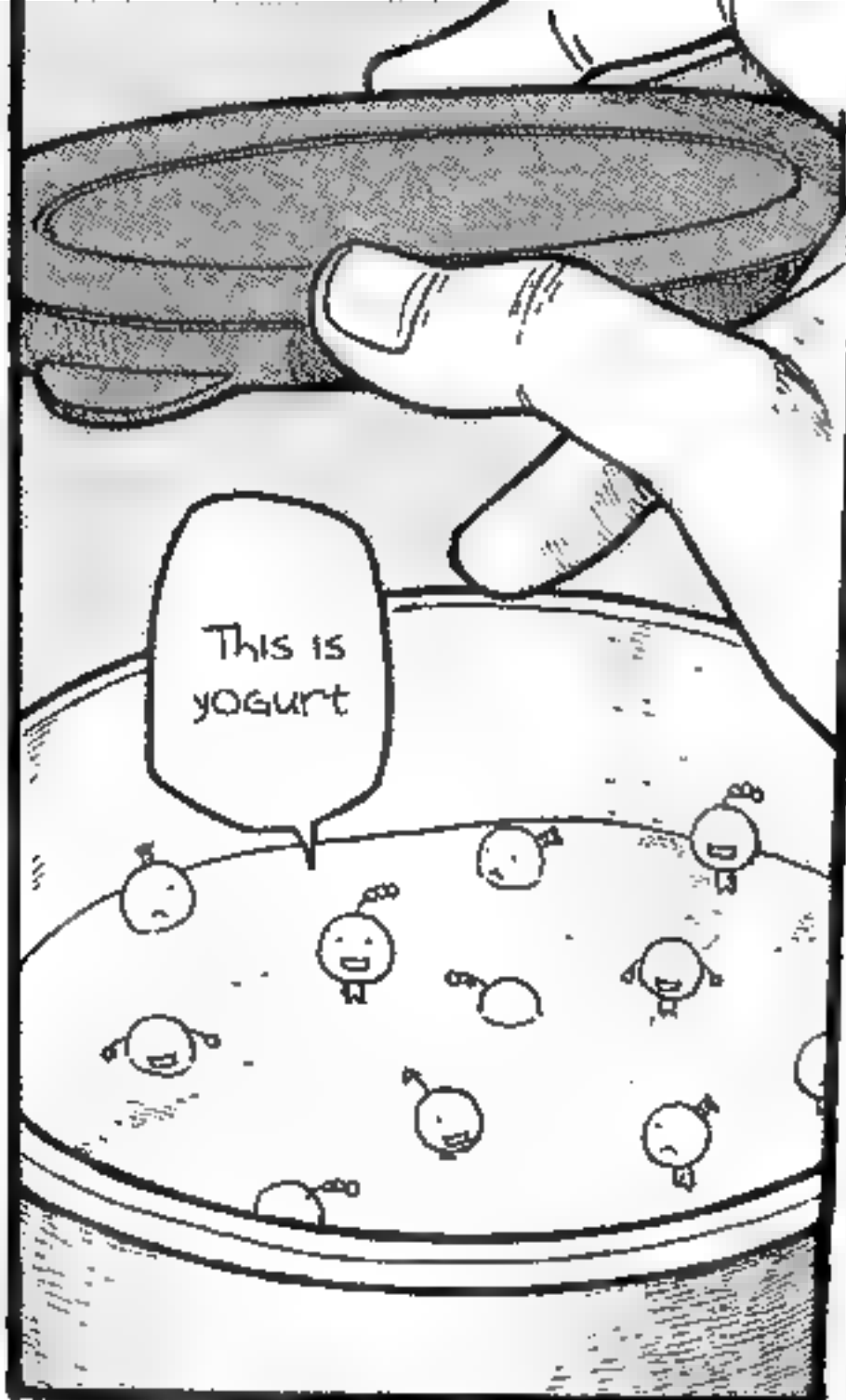
L. jugurti
Most dairy products in Japan are made with these guys.



B. bifidum
This is one of the species of Bifidobacterium. A large number of people find this bacteria to be very helpful



L. acidophilus
It lives in your intestines and is representative of good bacteria.



This is yogurt



AND THAT FRYING PAN FROM THAT SHELF?

OIKAWA, COULD YOU GET ME THOSE PICKLES

Open



ALL WE HAVE ARE FERMENTED FOODS HERE.

DON'T RELY ON DRUGS FOR EVERYTHING!

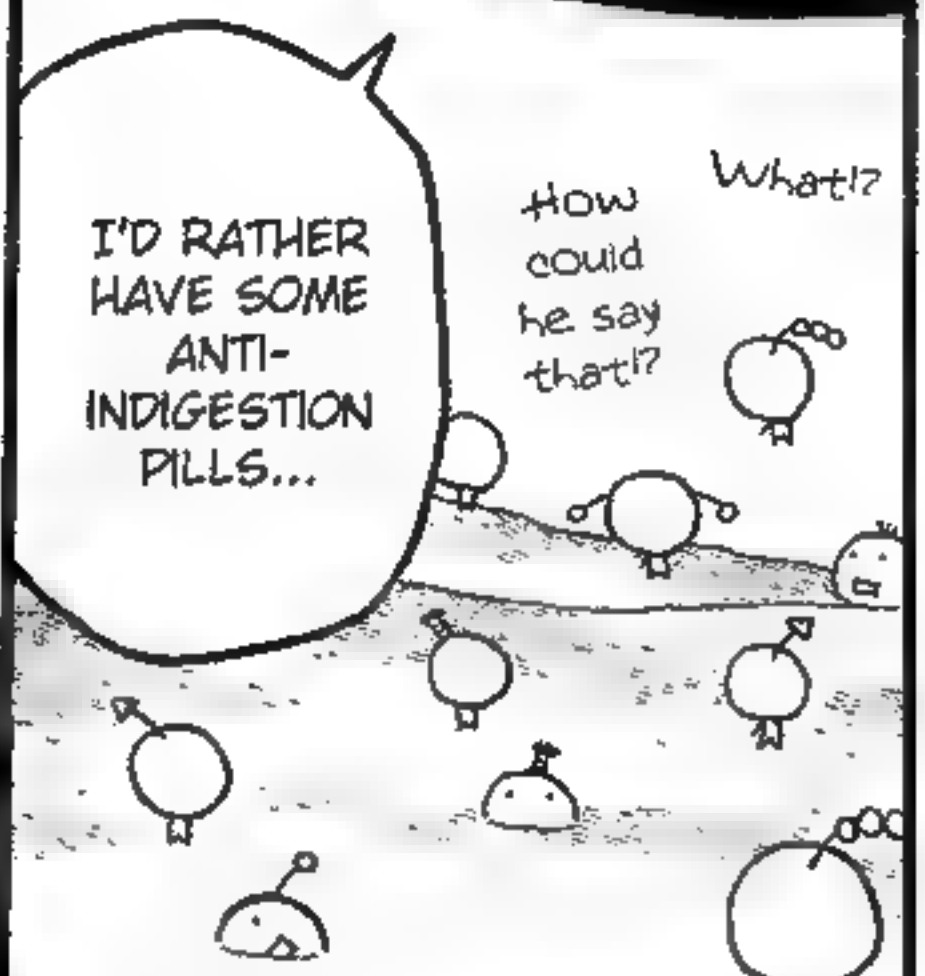


HASEGAWA-SAN...



EAT ANYTHING PICKLED BY LACTIC ACID BACTERIA ALL DAY TODAY TO CURE YOUR STOMACH.


BY THE WAY, MOST THINGS THAT ARE PICKLED IS THE RESULT OF LACTIC ACID FERMENTATION.



I'D RATHER HAVE SOME ANTI-INDIGESTION PILLS...

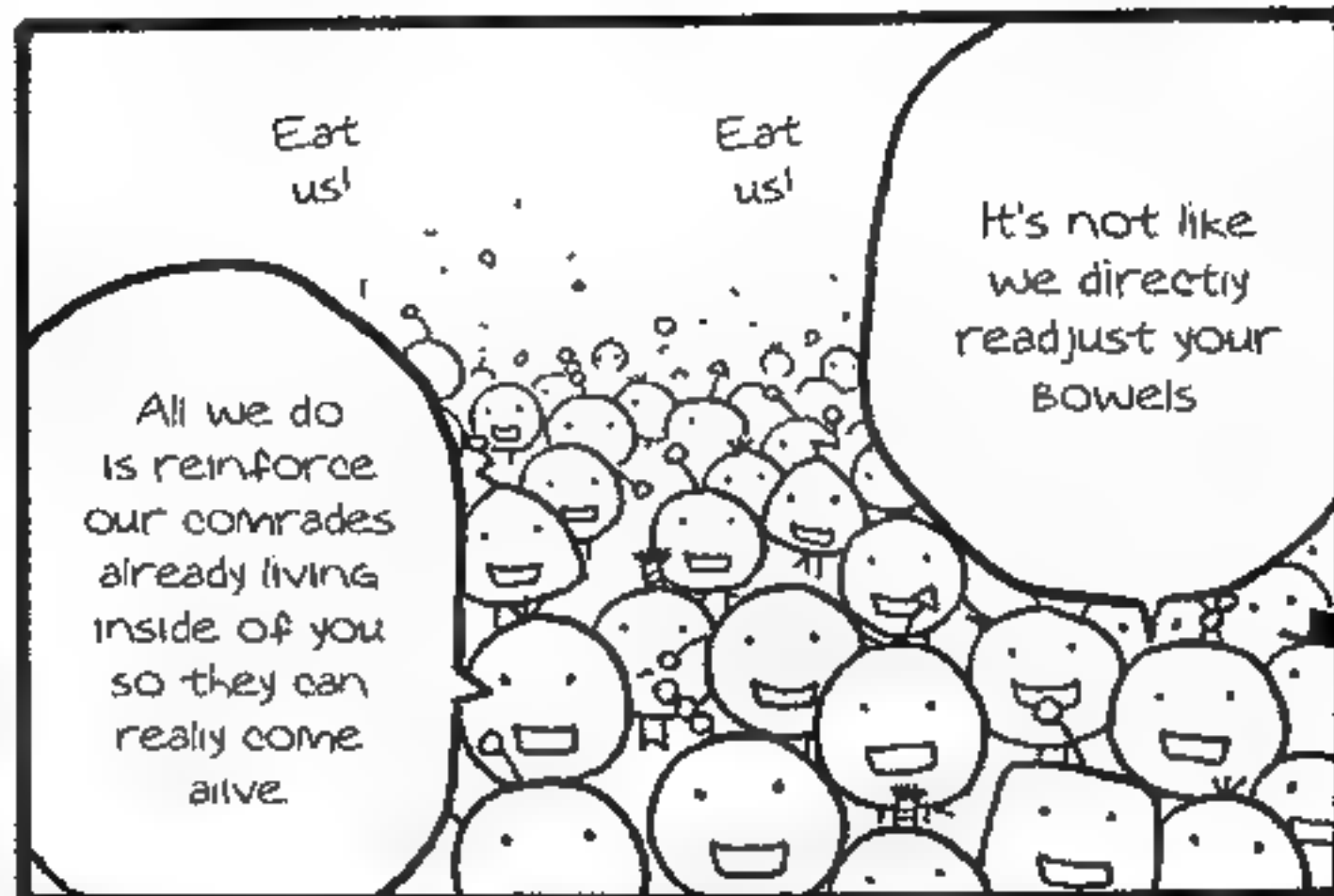
How could he say that!? What!?





B. longum
 You can buy calpis made at an agricultural university at their school festivals.



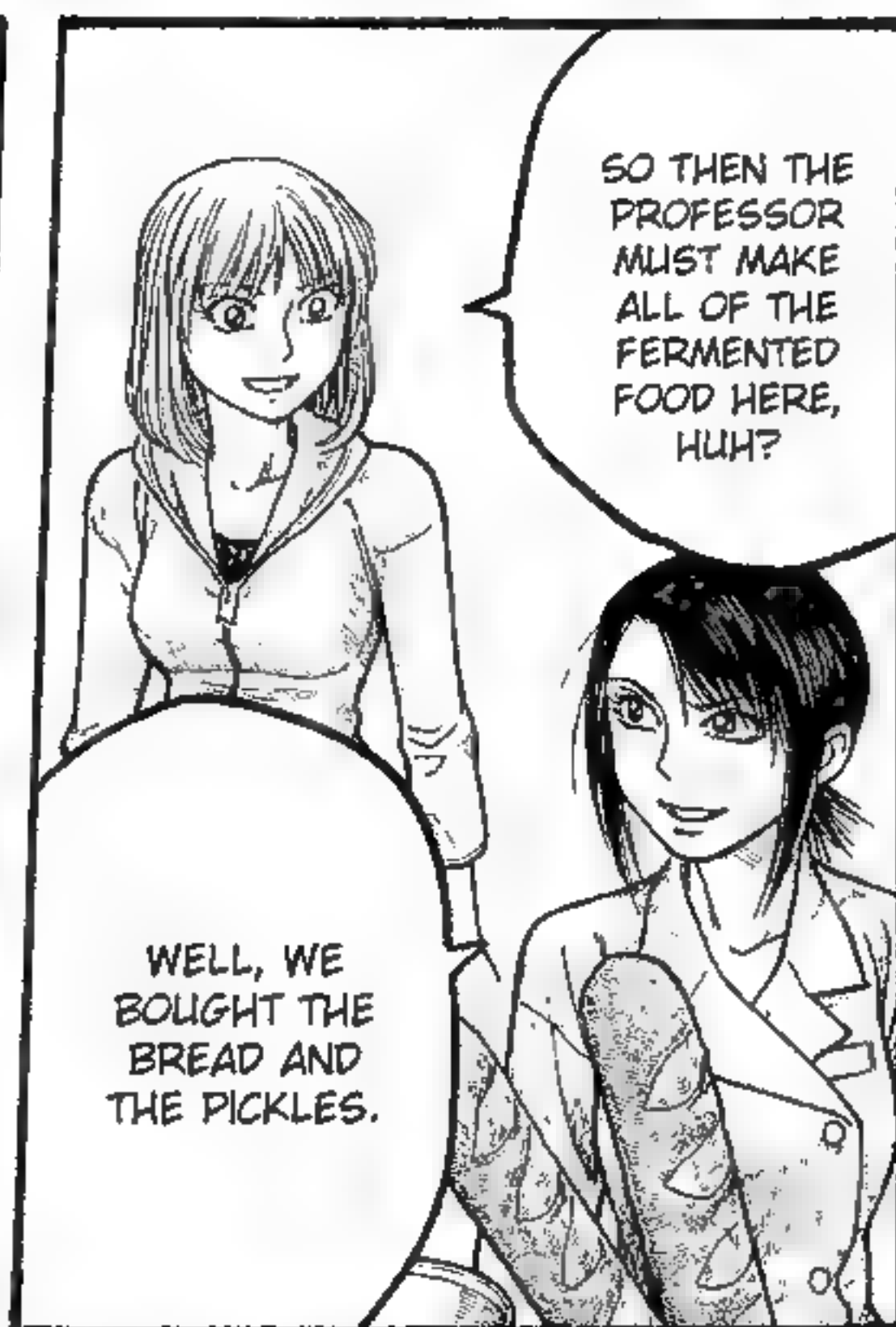
P. pentosaceus
 It plays a big part in pickling vegetables




L. plantarum
 You've met this bacteria when you've had any sweet pickles, too



L. brevis
Whether it's making pickles or caring for babies, just leave it to brevis.



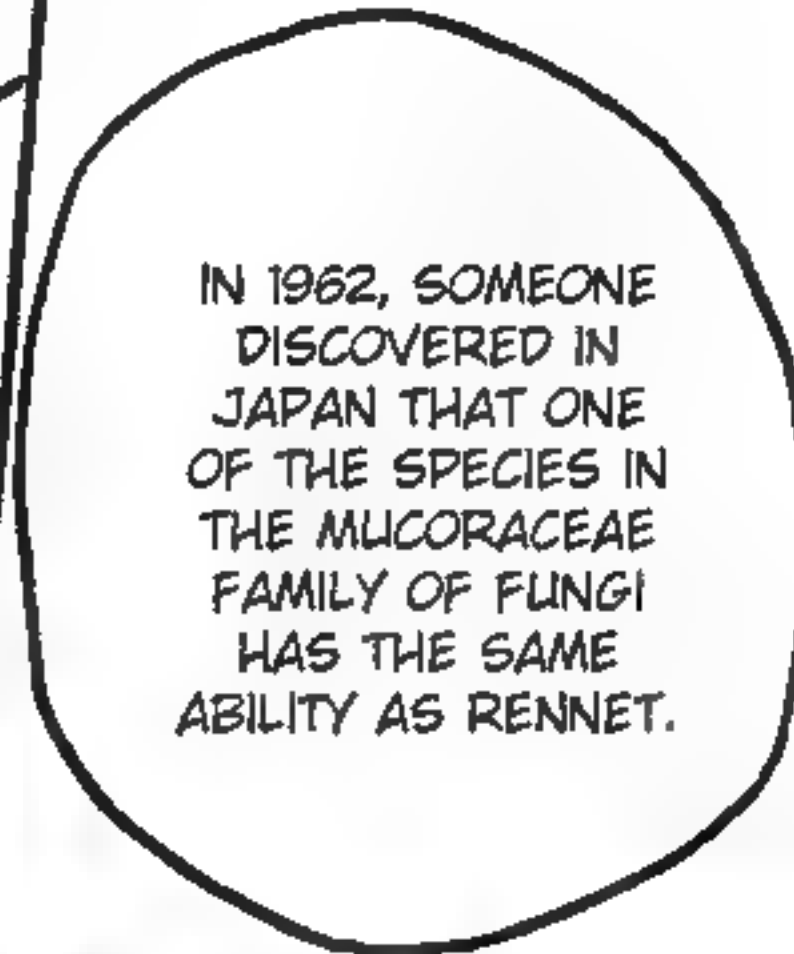
E. faecalis
People have been taking notice of its uses lately, so it's been hectic around this guy



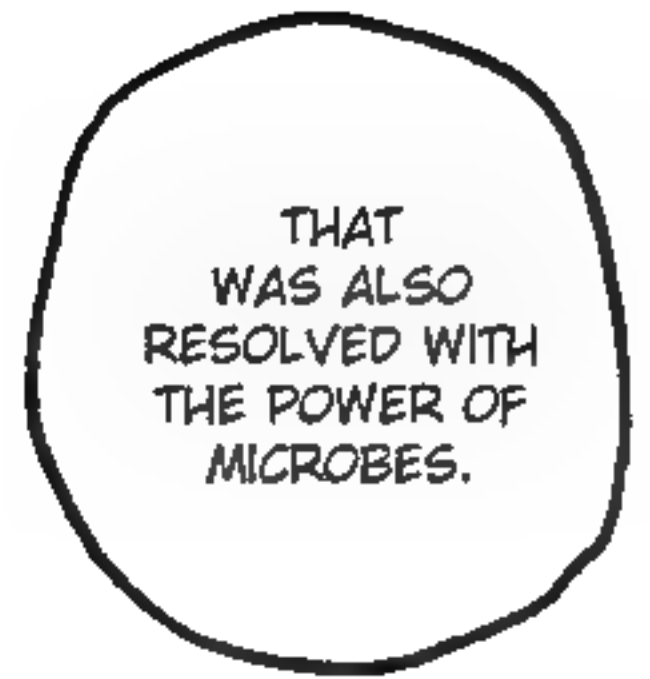


70% OF
THE CHEESE
PRODUCED IN
THE WORLD
TODAY USES
THIS FUNGUS.

IF YOU'RE
ALWAYS SANITIZING
EVERYTHING, YOU'LL
NEVER LEARN
ANYTHING ABOUT
MICROBES.



IN 1962, SOMEONE
DISCOVERED IN
JAPAN THAT ONE
OF THE SPECIES IN
THE MUCORACEAE
FAMILY OF FUNGI
HAS THE SAME
ABILITY AS RENNET.



THAT
WAS ALSO
RESOLVED WITH
THE POWER OF
MICROBES.



M. pusillus



IF YOU LEND A PEN
TO SOMEONE, YOU
DON'T KNOW WHAT
KIND OF GERMS
THEY'LL INFECT IT
WITH, SO THEY MAKE
ANTIBACTERIAL PENS.

THEY'VE
BEEN MAKING
STUFF LIKE
THIS RECENTLY,
TOO.



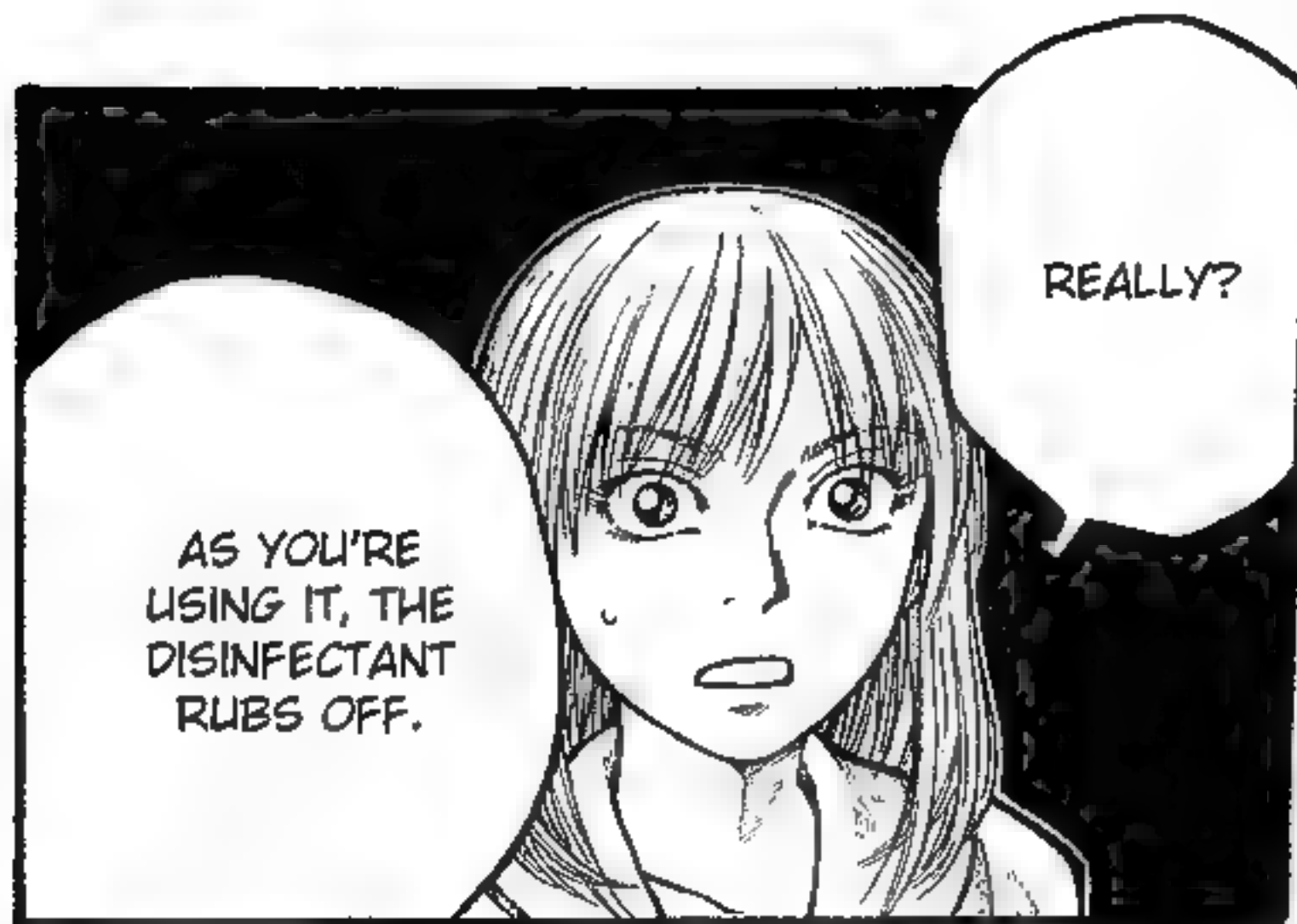
EVEN IF YOU
DISINFECT A BENCH
BEFORE SITTING
DOWN ON IT,
THERE'S NO POINT
IF YOU BREATHE IN
A COLD VIRUS.

THERE ARE
WAY TOO MANY
MICROBES
FOR YOU TO
COMPLETELY
AVOID THEM.



NOW
LOOK
HERE...

HAVEN'T
YOU EVER
QUESTIONED
SOMETHING
THAT SAID
IT WAS "ANTI-
BACTERIAL"?



AS YOU'RE
USING IT, THE
DISINFECTANT
RUBS OFF.

REALLY?



YOU PROBABLY
TRANSFER IT
FROM YOUR
HAND TO YOUR
MOUTH.

AND THEN
AFTER IT'S
ON YOU,



BESIDES,
EVEN AMONG
ANTIBACTERIAL
PRODUCTS,

THE
POORLY-MADE
ONES LOSE
THEIR EFFECT
AFTER A
FEW DAYS.



It's fine,
as long as
the person
buying it is
satisfied.

THEN WHAT'S
THE POINT OF
THE DEMAND FOR
ANTIBACTERIAL
PRODUCTS...?

THE WAY I SEE IT,
IT'S THE SAME
AS WRITING
NEGATIVE AIR ION
ON CONSUMER
ELECTRONICS TO
GET THEM TO SELL.



INSTEAD OF
DISINFECTING
MICROBES,

Shut
up...

WOULDN'T IT BE
FASTER FOR YOU
TO FIND A WAY TO
LIVE WITH THEM
AND THINK ABOUT
HOW TO LIVE
HEALTHILY?

Eat
me,
too!
Eat!

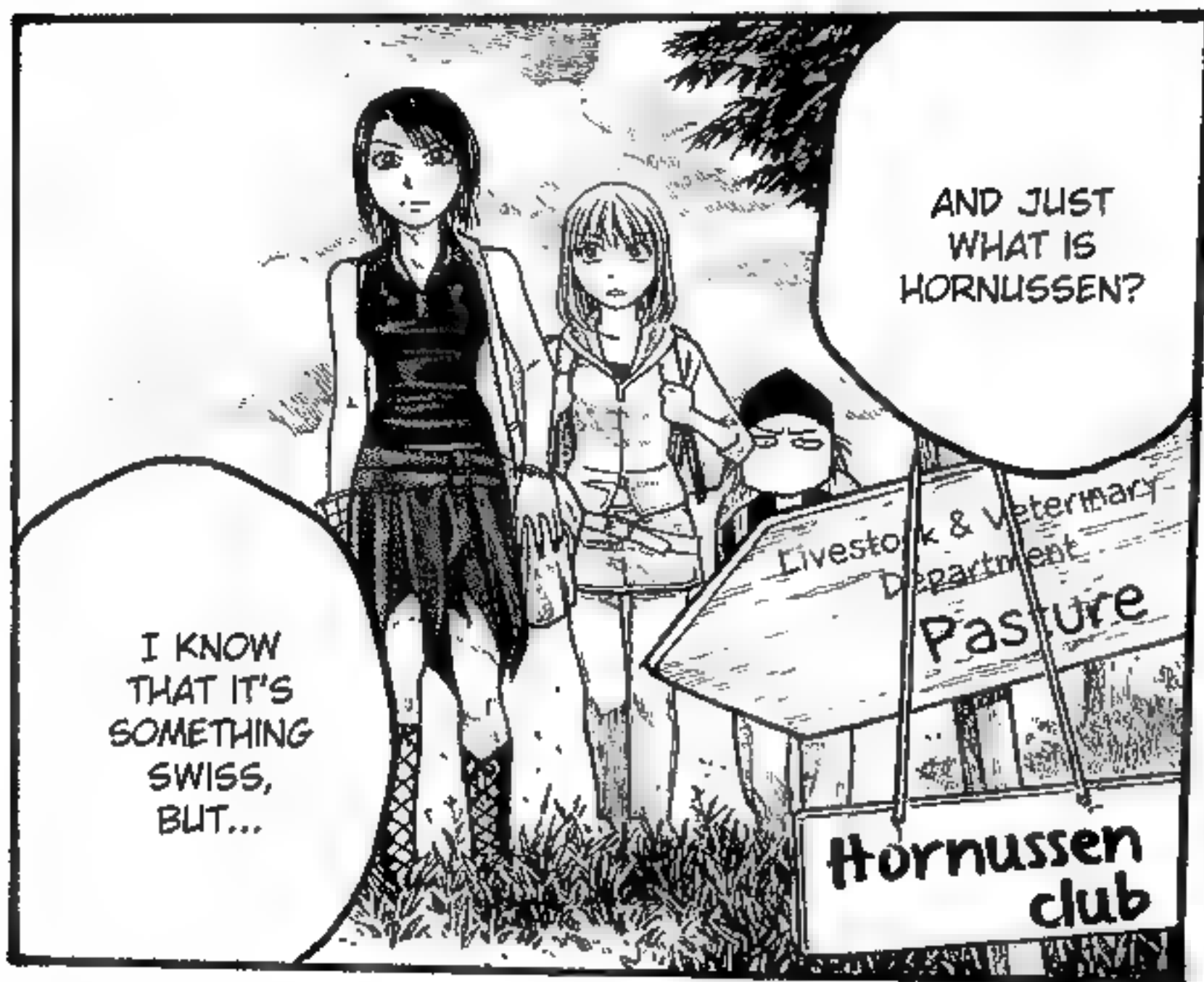
Me,
too!

Me,
too!



WHAT KIND
OF FOOD ARE
YOU MAKING
WITH THIS?

WE'RE
ALL SET,
SO LET'S
GO!



AND JUST
WHAT IS
HORNUSSEN?

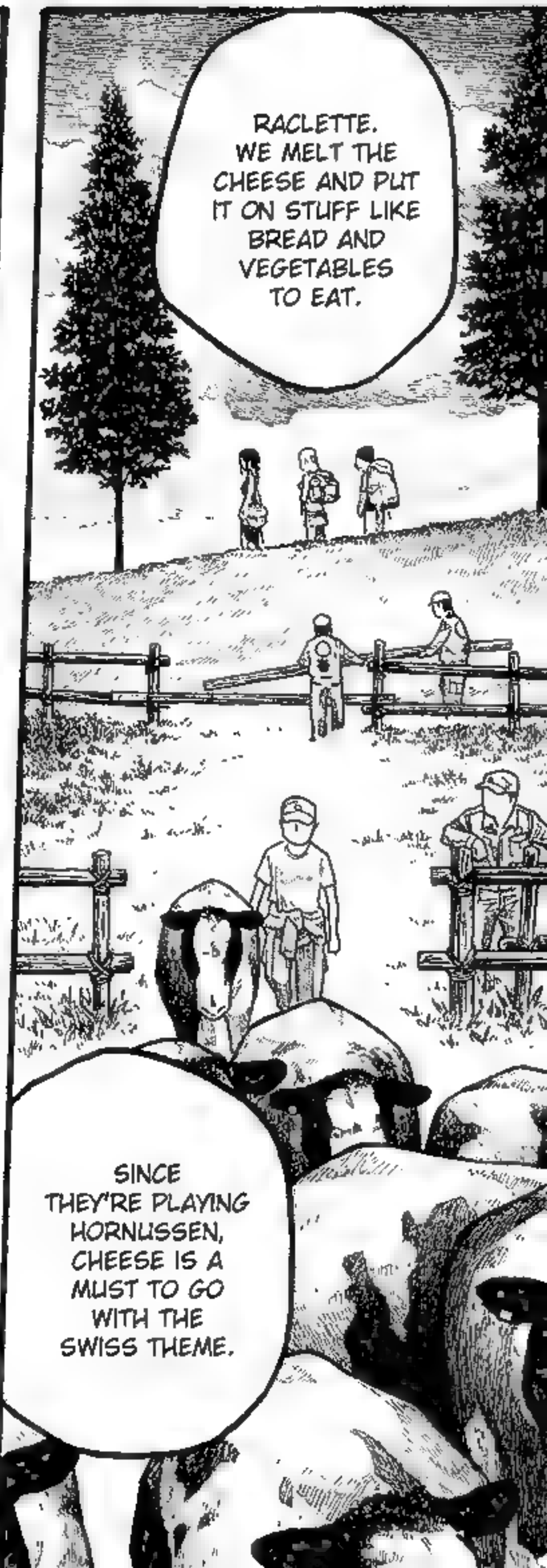
I KNOW
THAT IT'S
SOMETHING
SWISS,
BUT...



AH!
THERE
THEY
ARE.

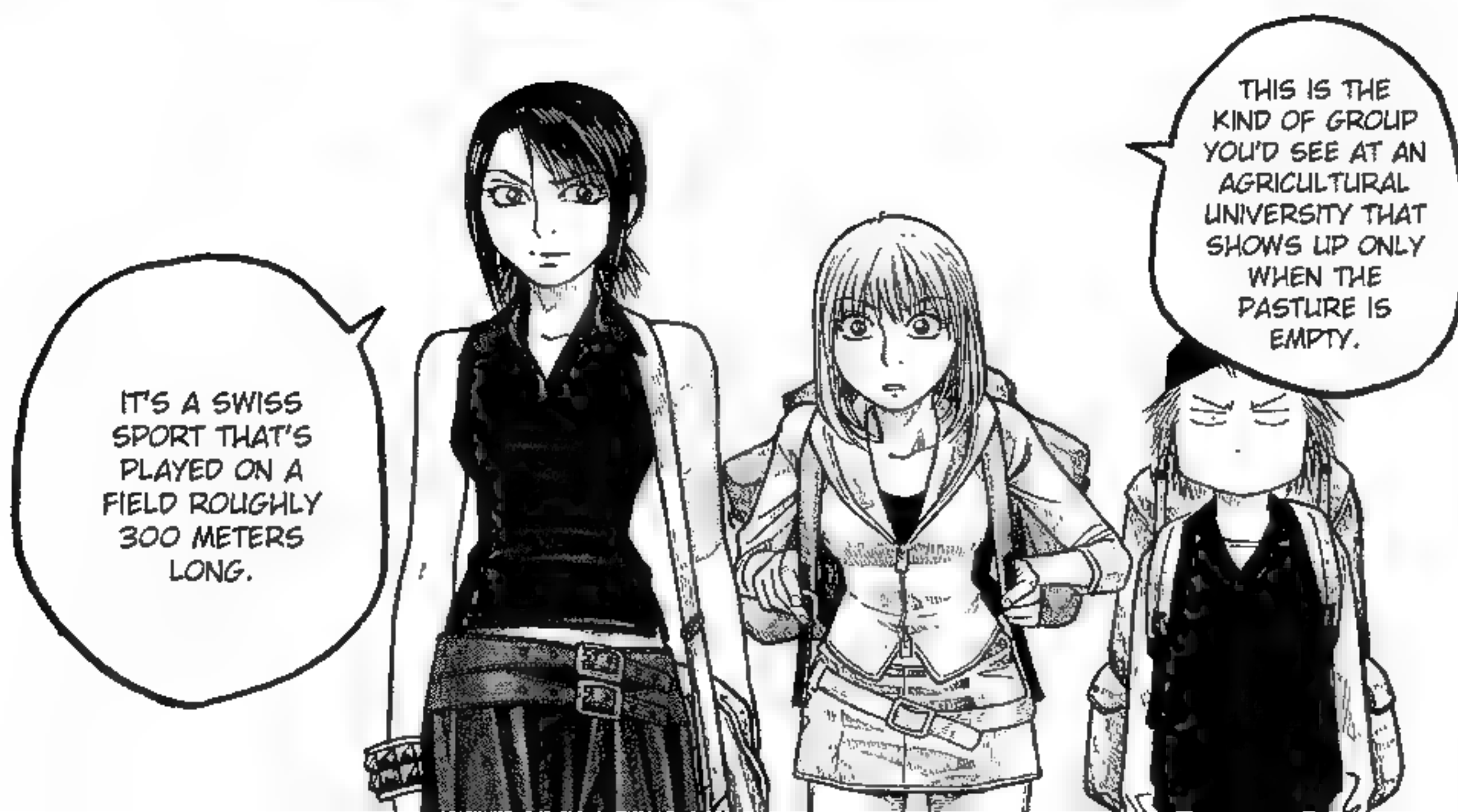
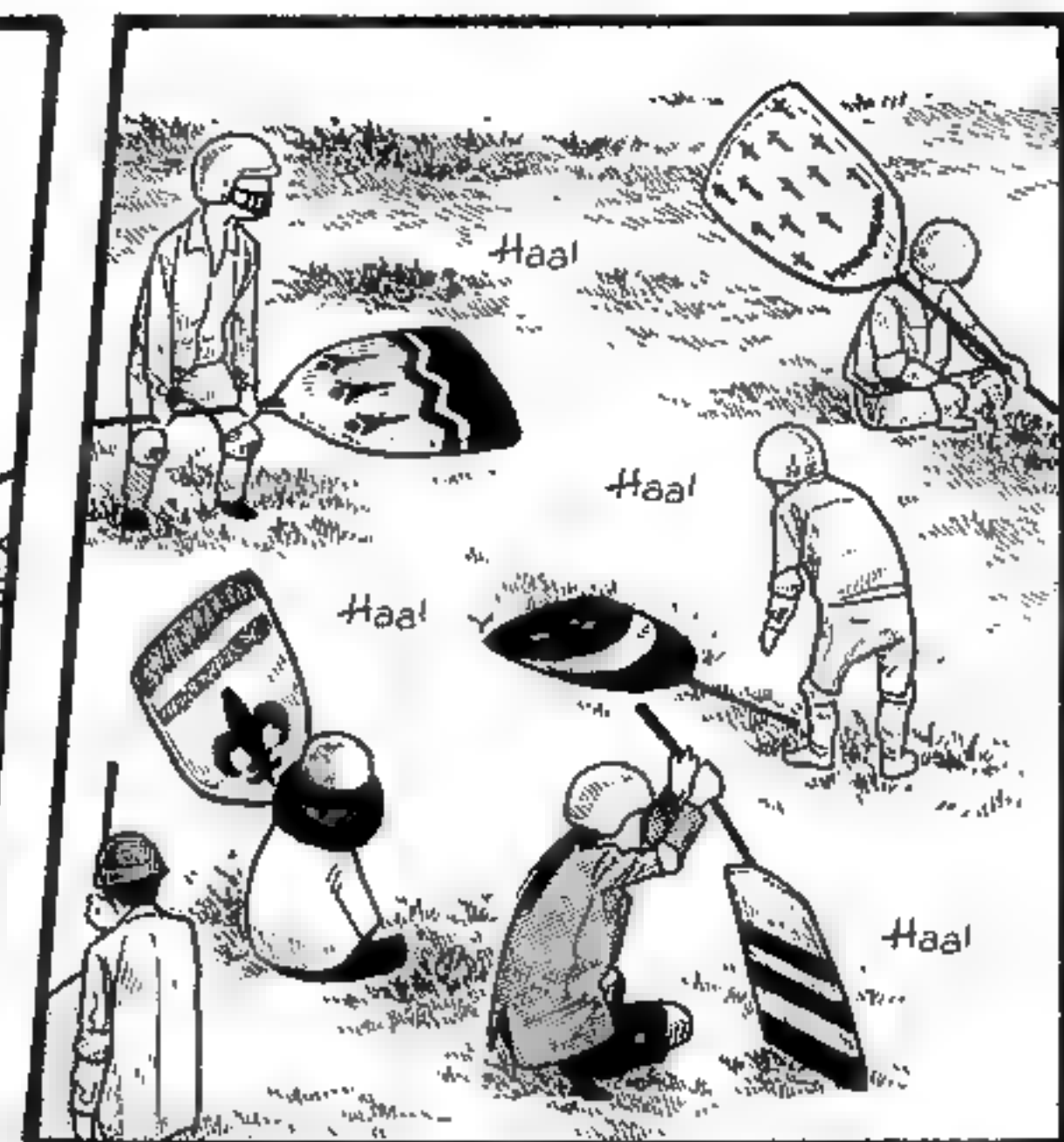
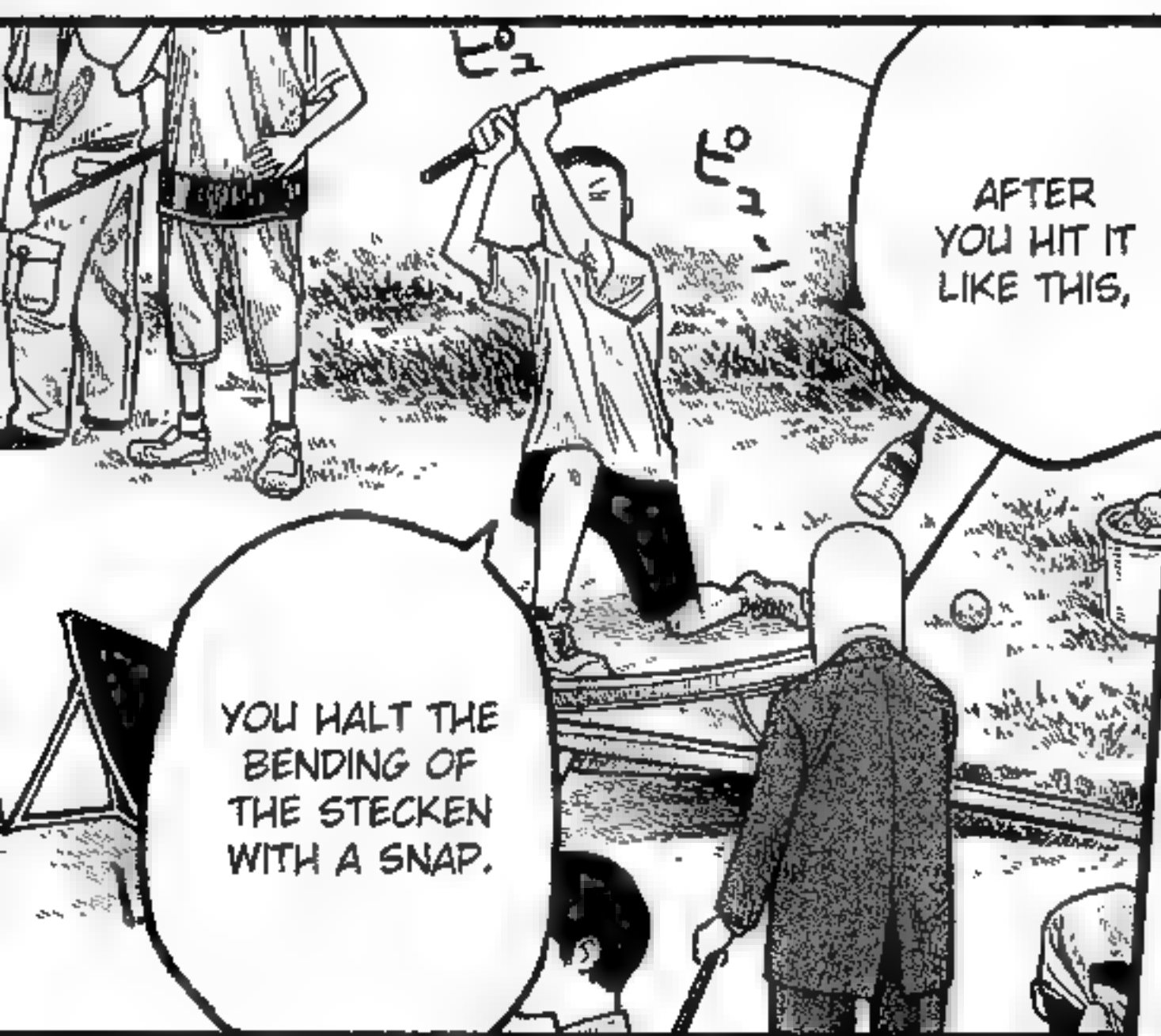
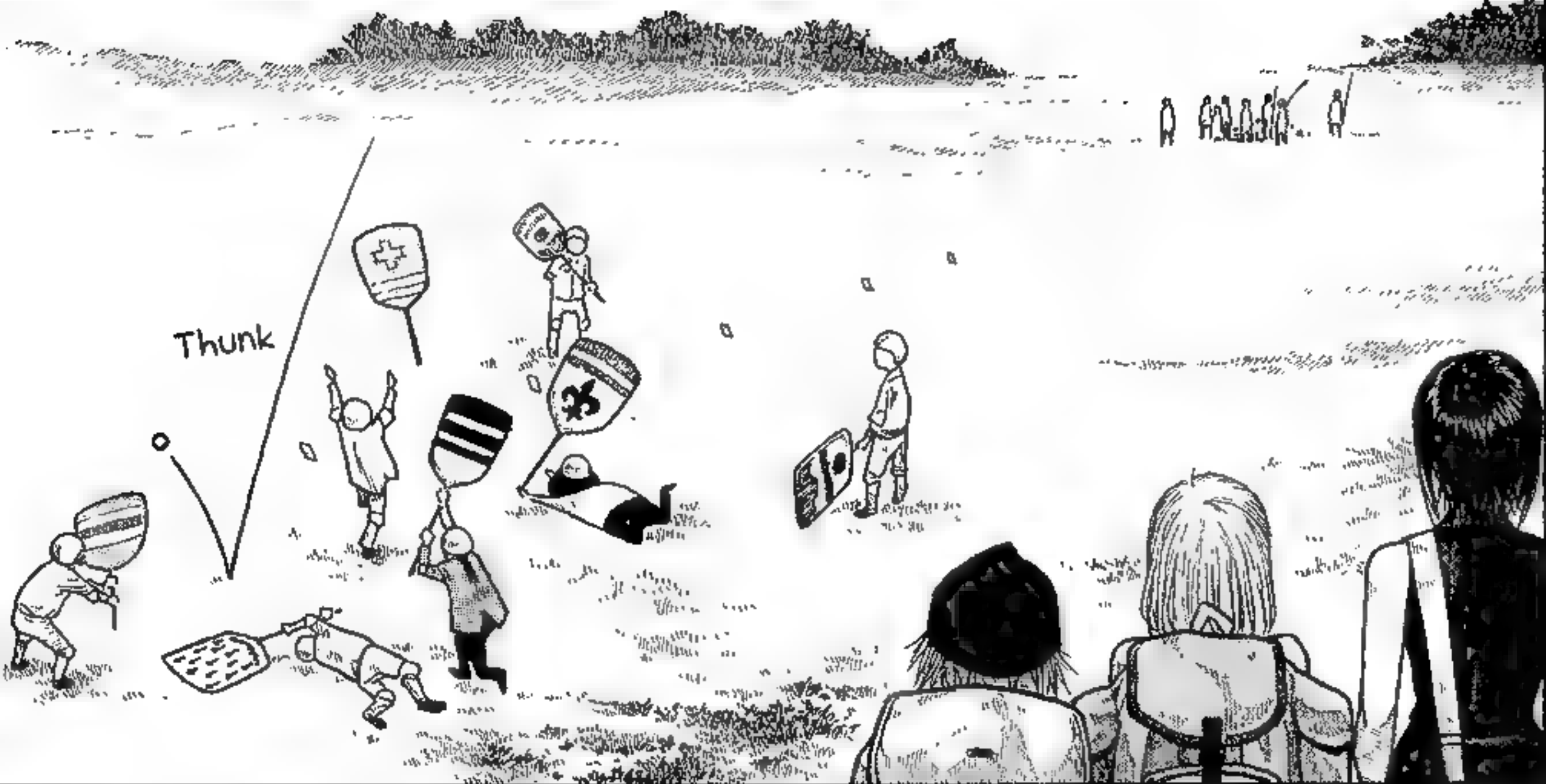
Waaa!

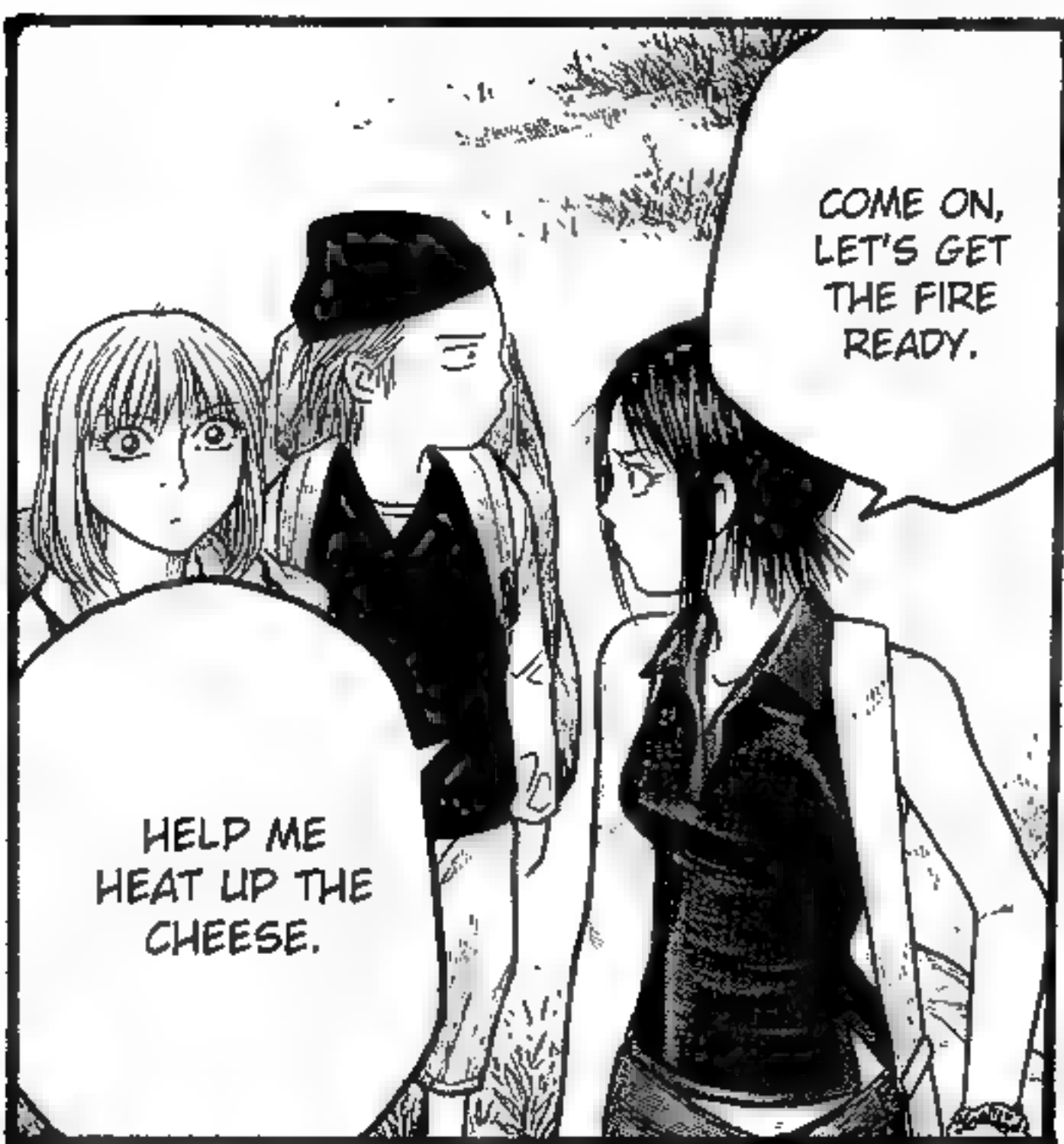
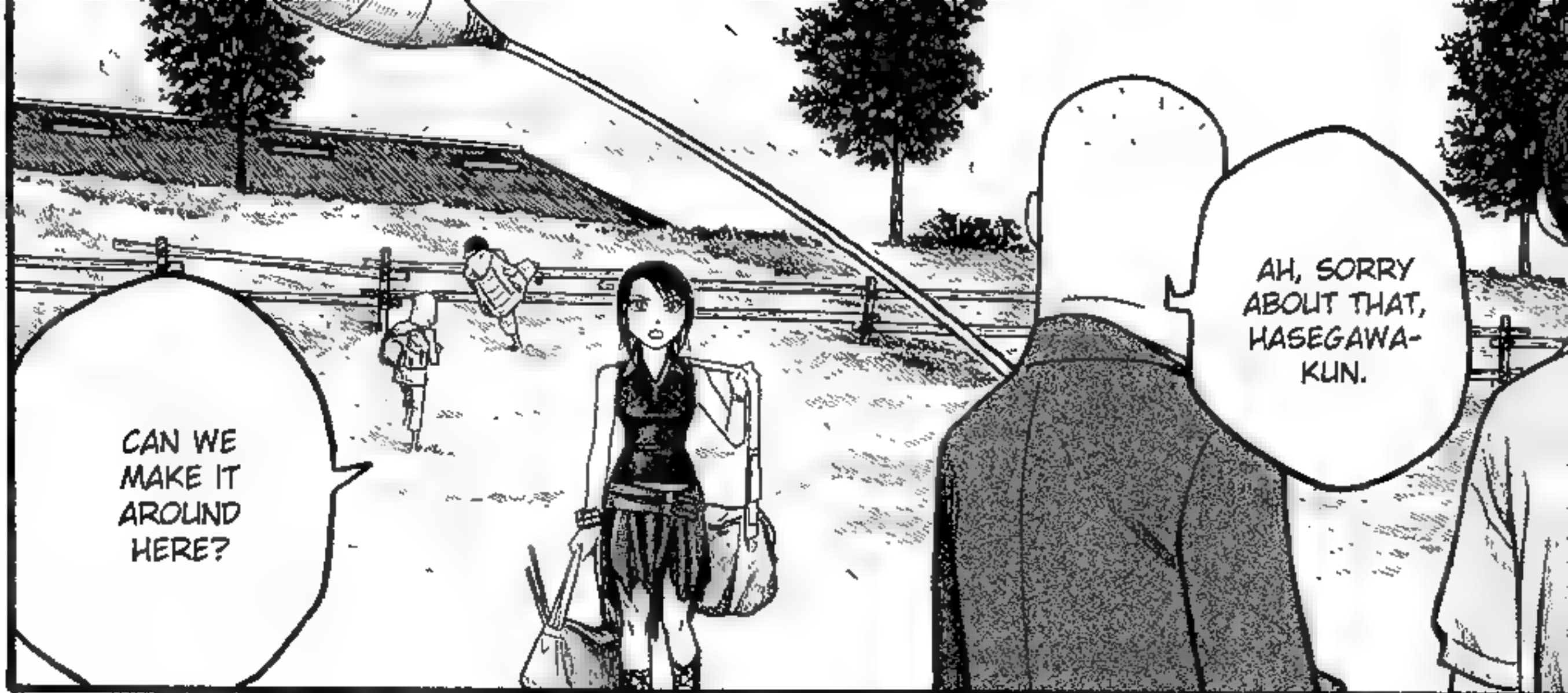
Waaa!



RACLETTE.
WE MELT THE
CHEESE AND PUT
IT ON STUFF LIKE
BREAD AND
VEGETABLES
TO EAT.

SINCE
THEY'RE PLAYING
HORNUSSEN,
CHEESE IS A
MUST TO GO
WITH THE
SWISS THEME.





Waaaa!

Waaaa!

Crackle

Crackle

I'M
STARTING
TO GET THE
GIST OF IT.

ME, TOO.

Thunk

IT SEEMS LIKE
THEY CAN DO
ANYTHING AS LONG
AS THE BALL HITS
THE FAN, EVEN BY
THROWING THEM.

Crackle
Crackle

THEY STOP
THE BALLS
THE OTHER
TEAM HITS
WITH THOSE
FANS.

Charcoal

AFTER
THE GAME,
EVERYONE
YODELS
TOGETHER.

TO BE
HONEST...
IS THAT EVEN
ANY FUN?

IT FEELS
LIKE THEY'RE
PRACTICING
GOLF AND
FUNGO AT THE
SAME TIME.

Crackle
Crackle



Kaoru Misato
 He's a second-year. He failed at home-brewing sake and now he has a large debt. However, he came to an agreement with Itsuki.



Takuma Kawahama
He's a second-year. He's in debt along with M sato. He likes to eat bugs. The reason for that will be revealed eventually

SAWAKI-KUN, I SAW YOU ON THE BULLETIN BOARD.

FIRST YOU CAUSE THAT UPROAR WITH A DEAD BODY, THEN THERE WAS THAT INCIDENT WITH THE FOOD POISONING, AND NOW YOU'RE A VEGETABLE THIEF. YOU SURE HAVE MADE A NAME FOR YOURSELF.

SAWAKI-KUN,

THIS IS NAGAMINE-KUN, A THIRD-YEAR IN THE LIVESTOCK DEPARTMENT AND THE PRESIDENT OF THE HORNUSSEN CLUB.

I WAS THE ONE THAT MADE THAT CURRY.

Grab

SAWAKI-KUN, SORRY ABOUT WHAT HAPPENED DURING ORIENTATION.

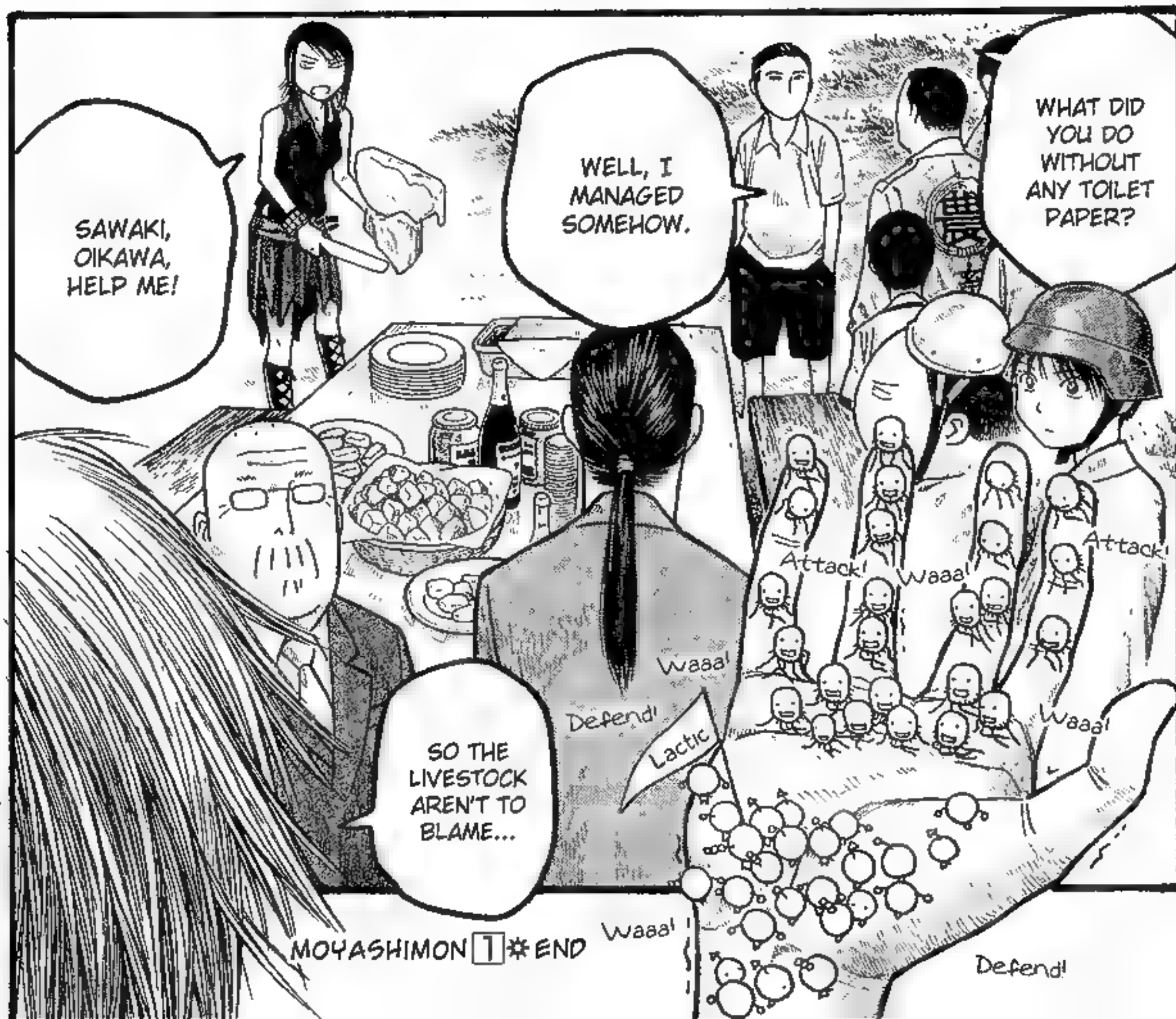
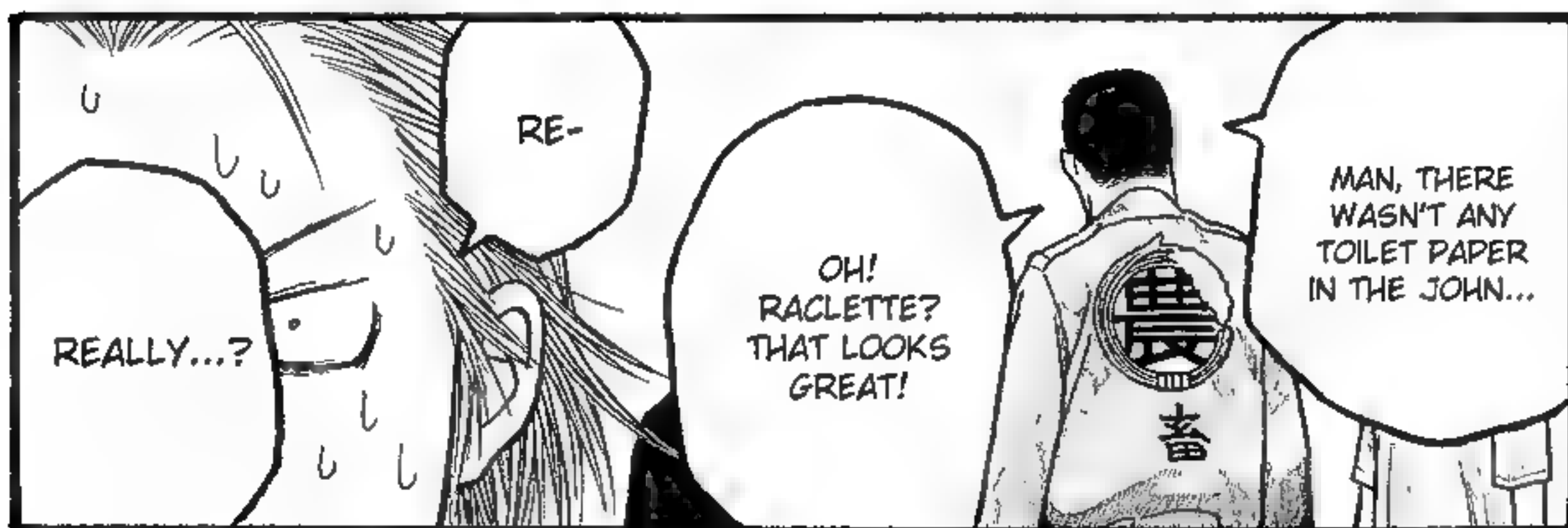
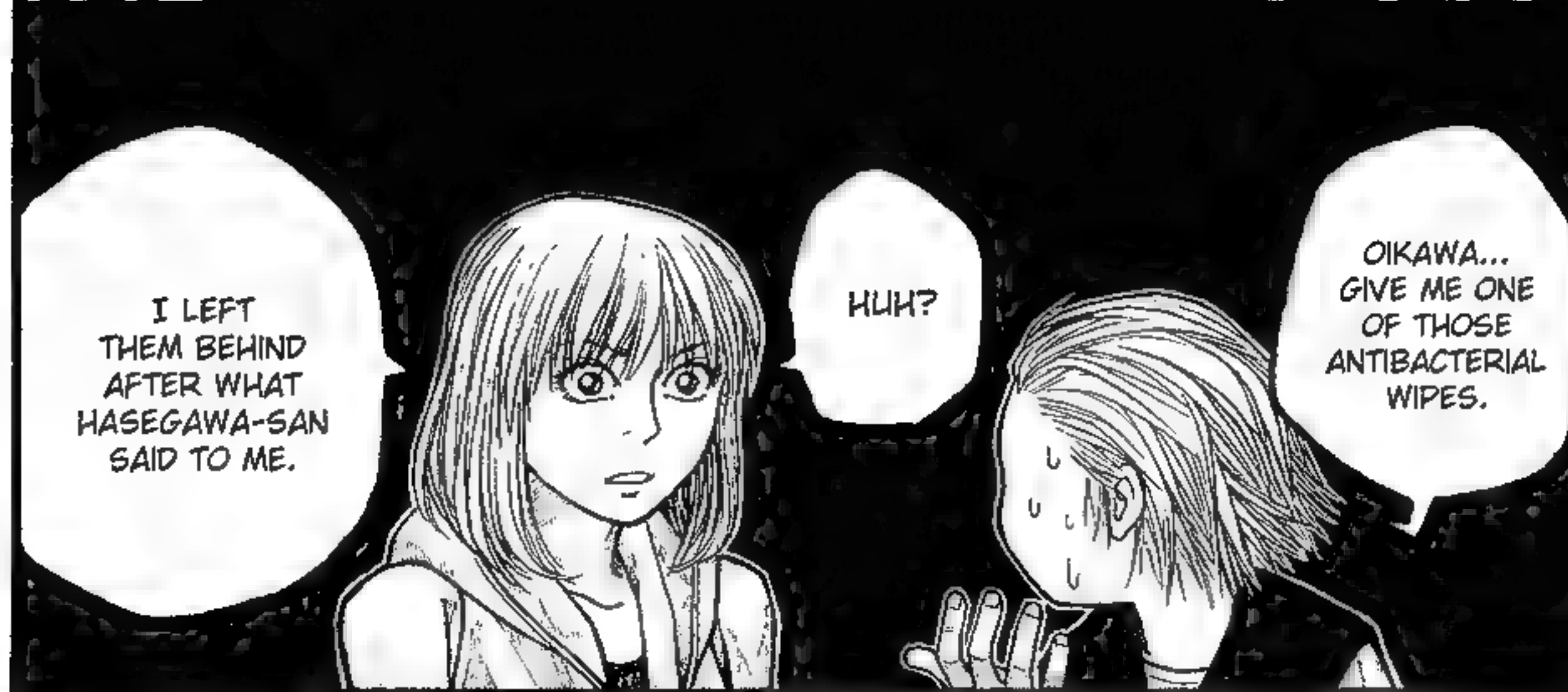
Waa!

Waa!

Waa!

DON'T WORRY ABOUT IT. I'M FINE NOW.

THERE ARE A LOT OF GERMS WHEN IT COMES TO LIVESTOCK, SO I WAS TRYING TO BE PARTICULARLY CAREFUL.



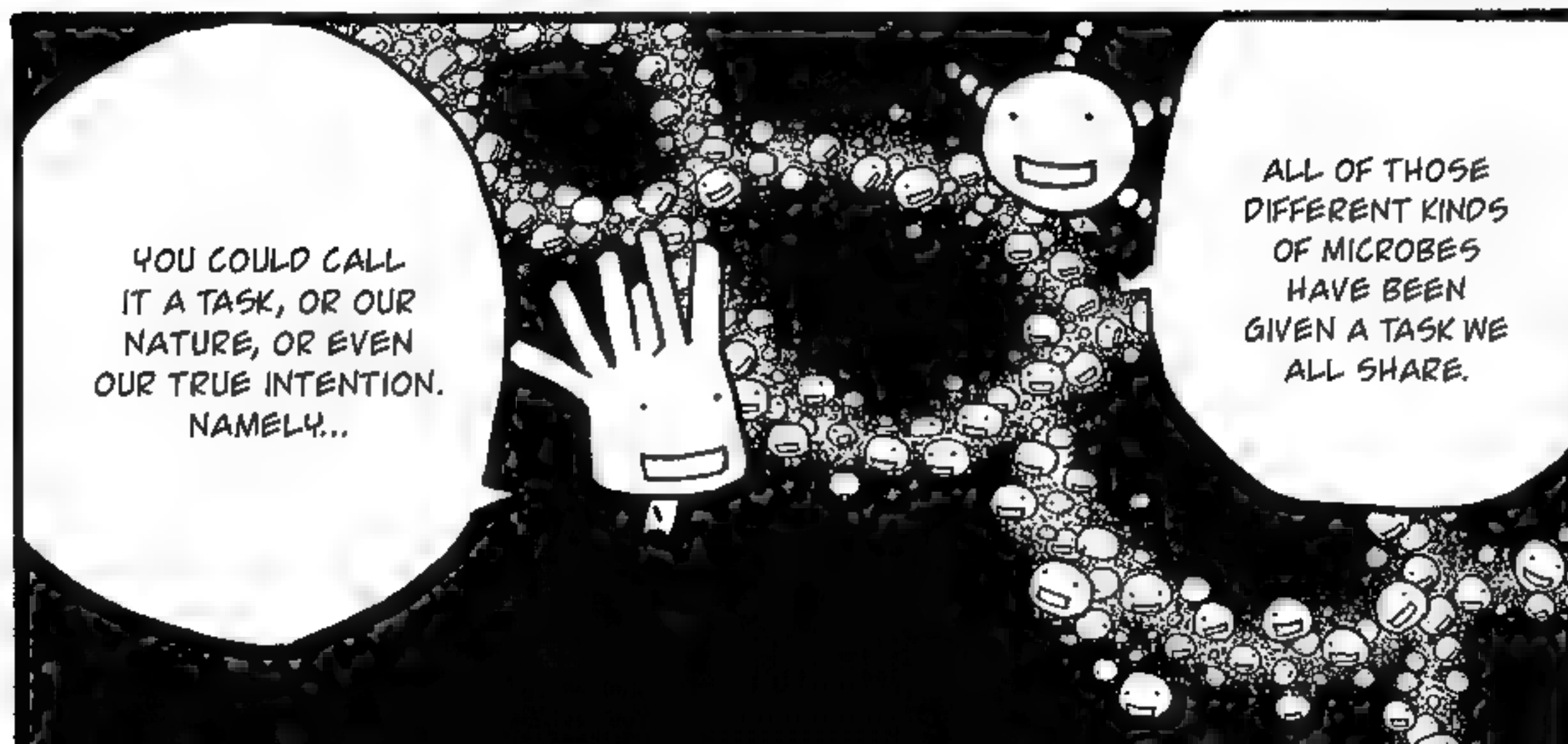
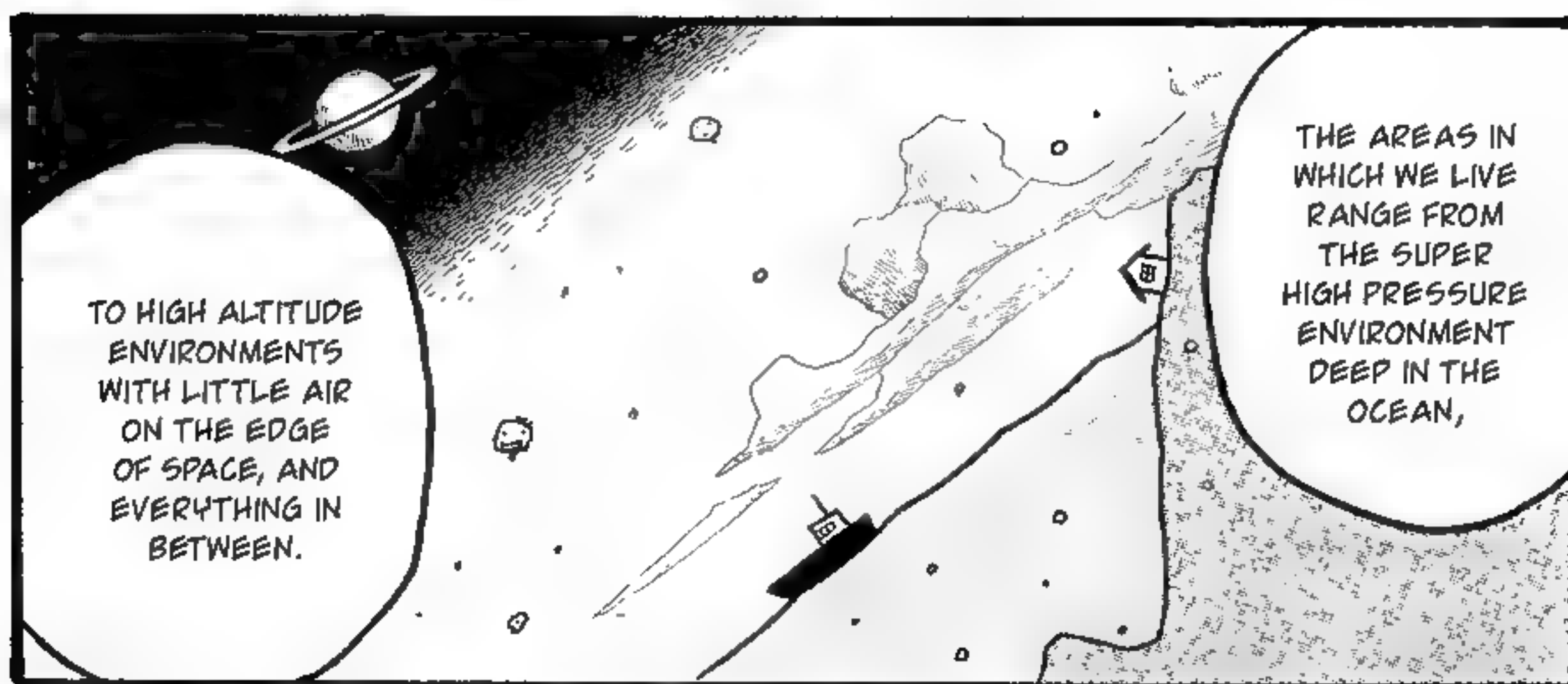
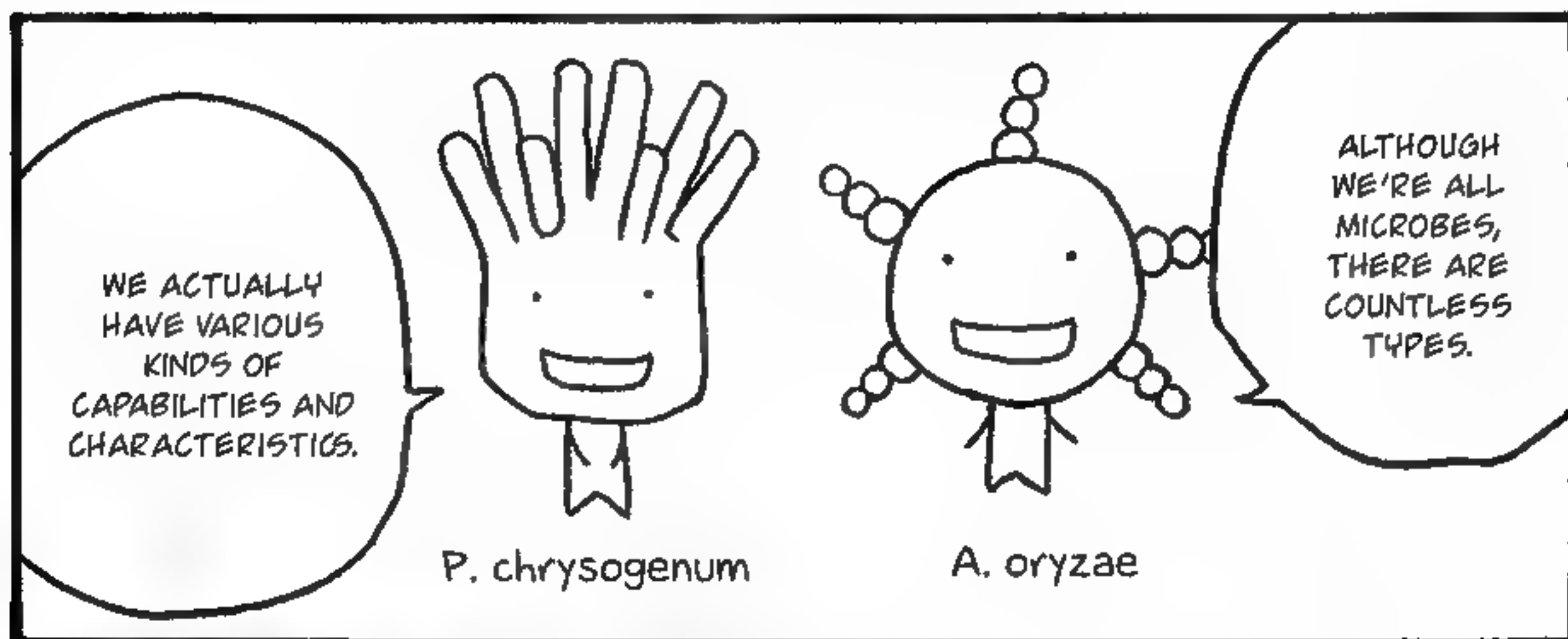
Please send letters.



E. coli
It's also known as colon bacteria. Even if you don't have any toilet paper, avoid using your hand.

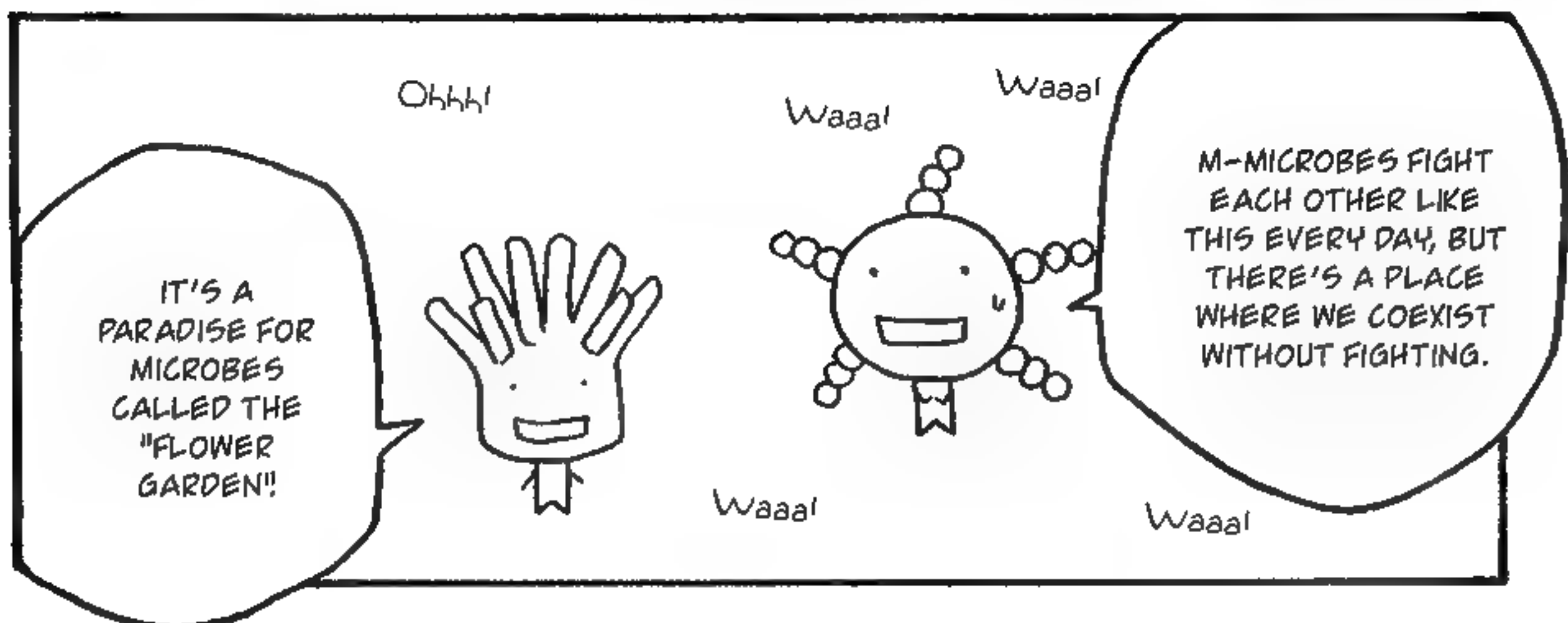
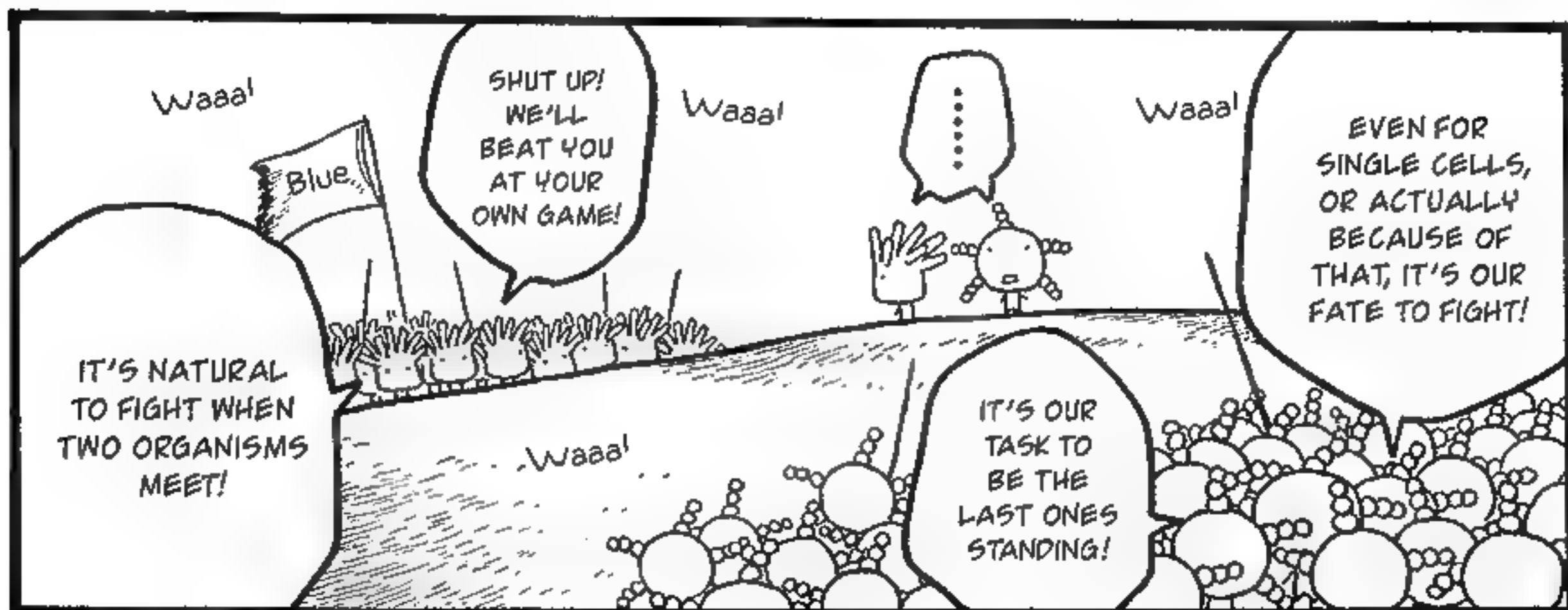
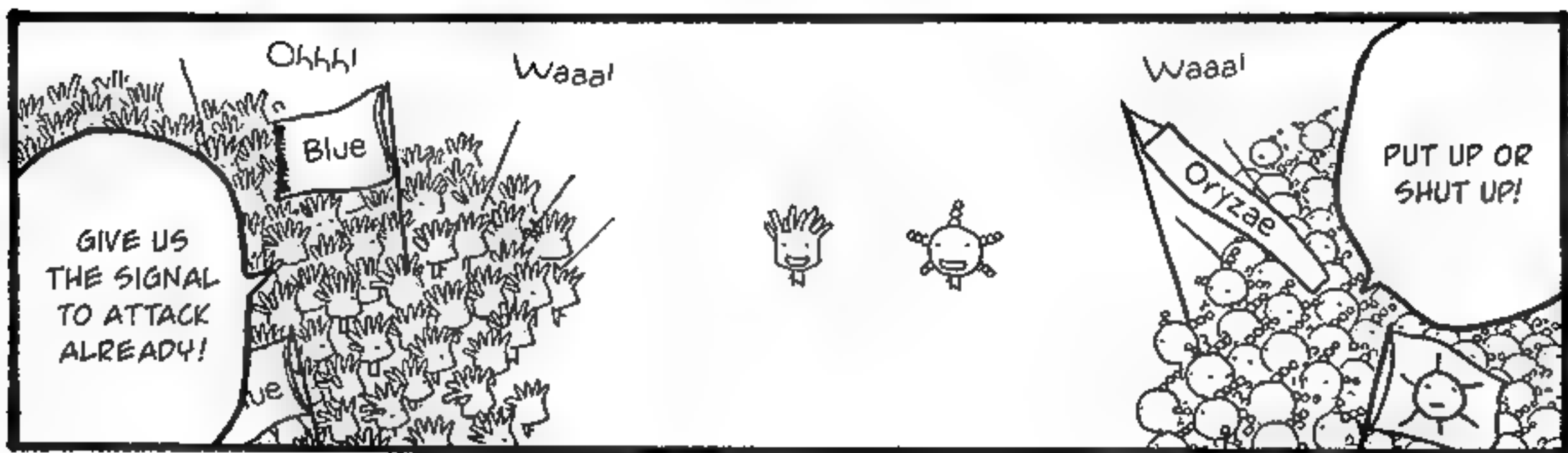
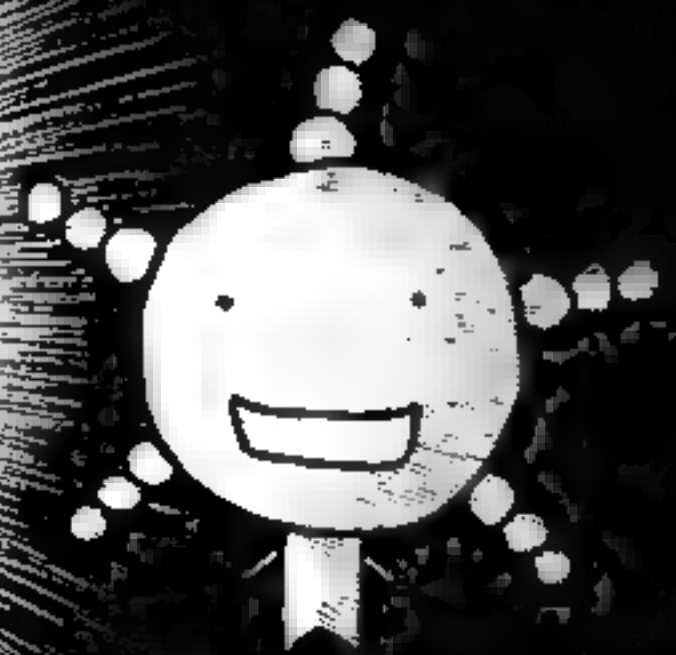
おまけ

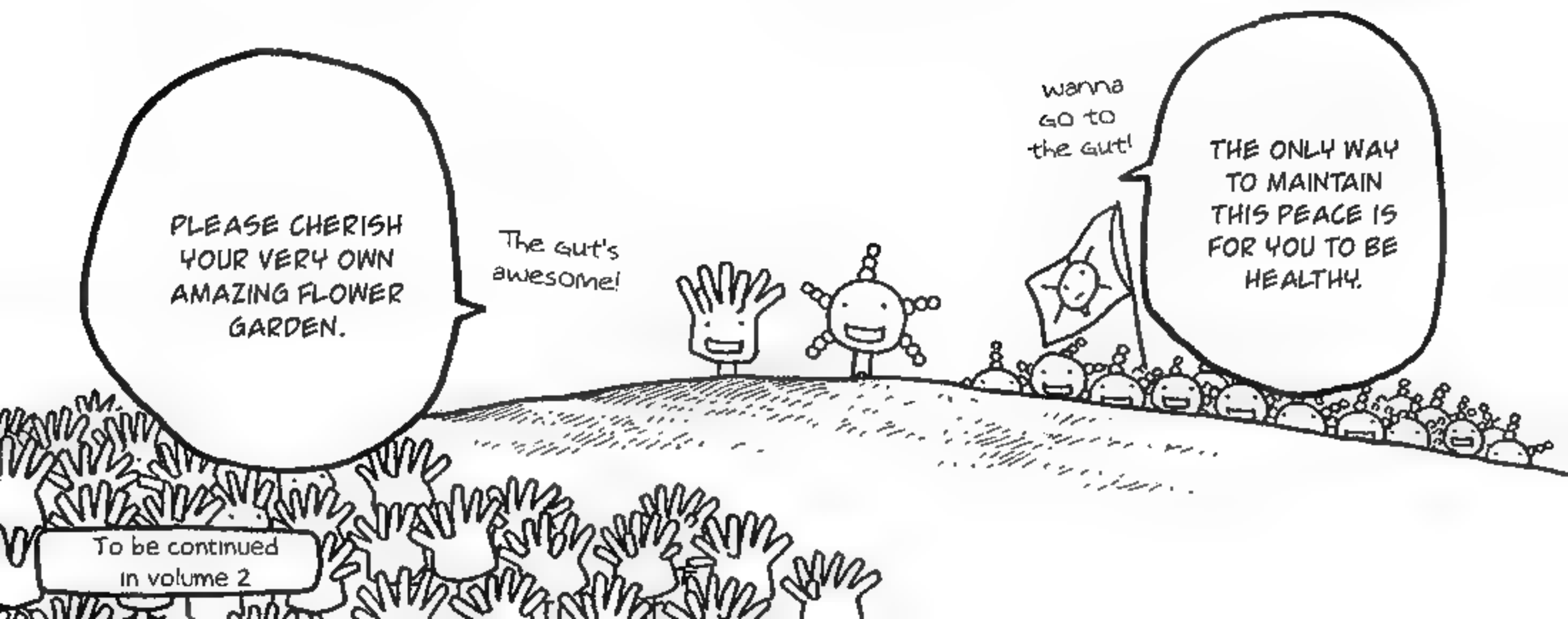
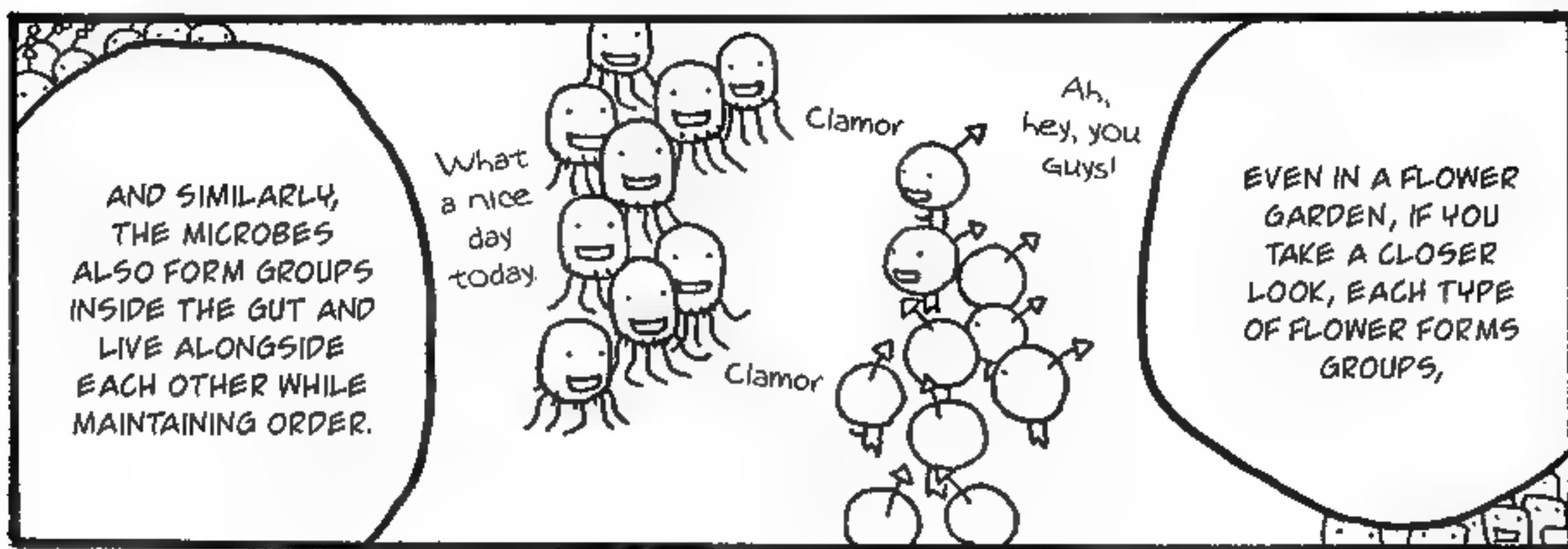
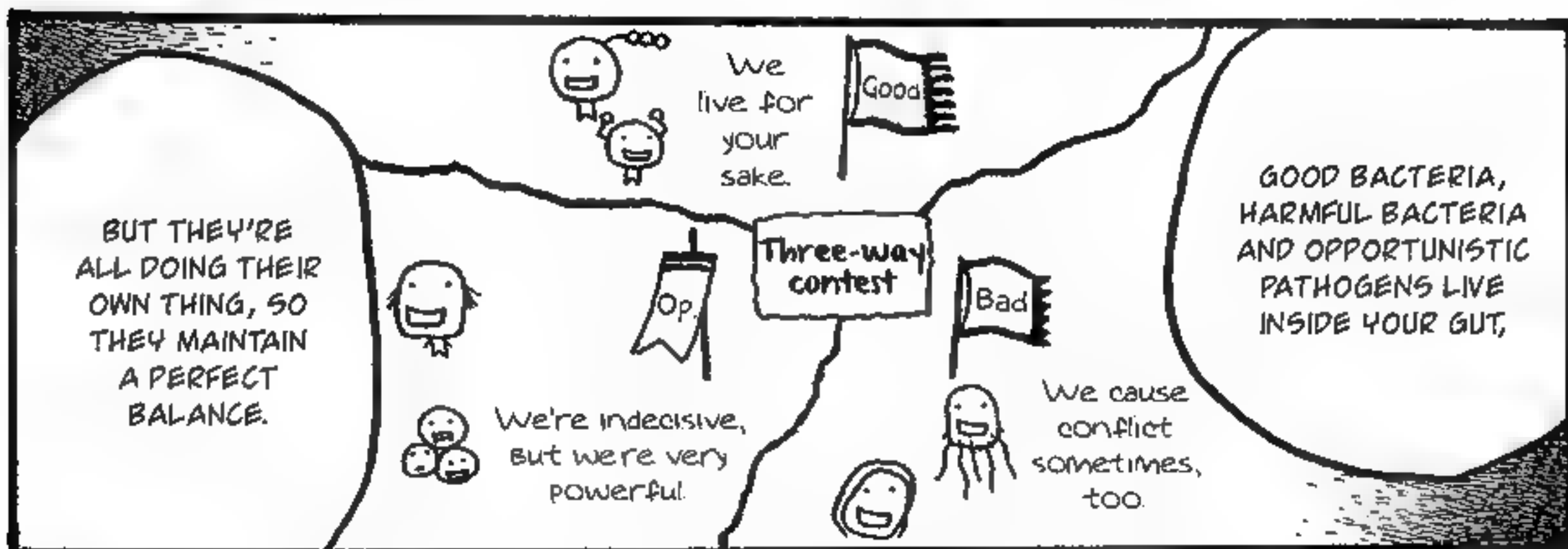
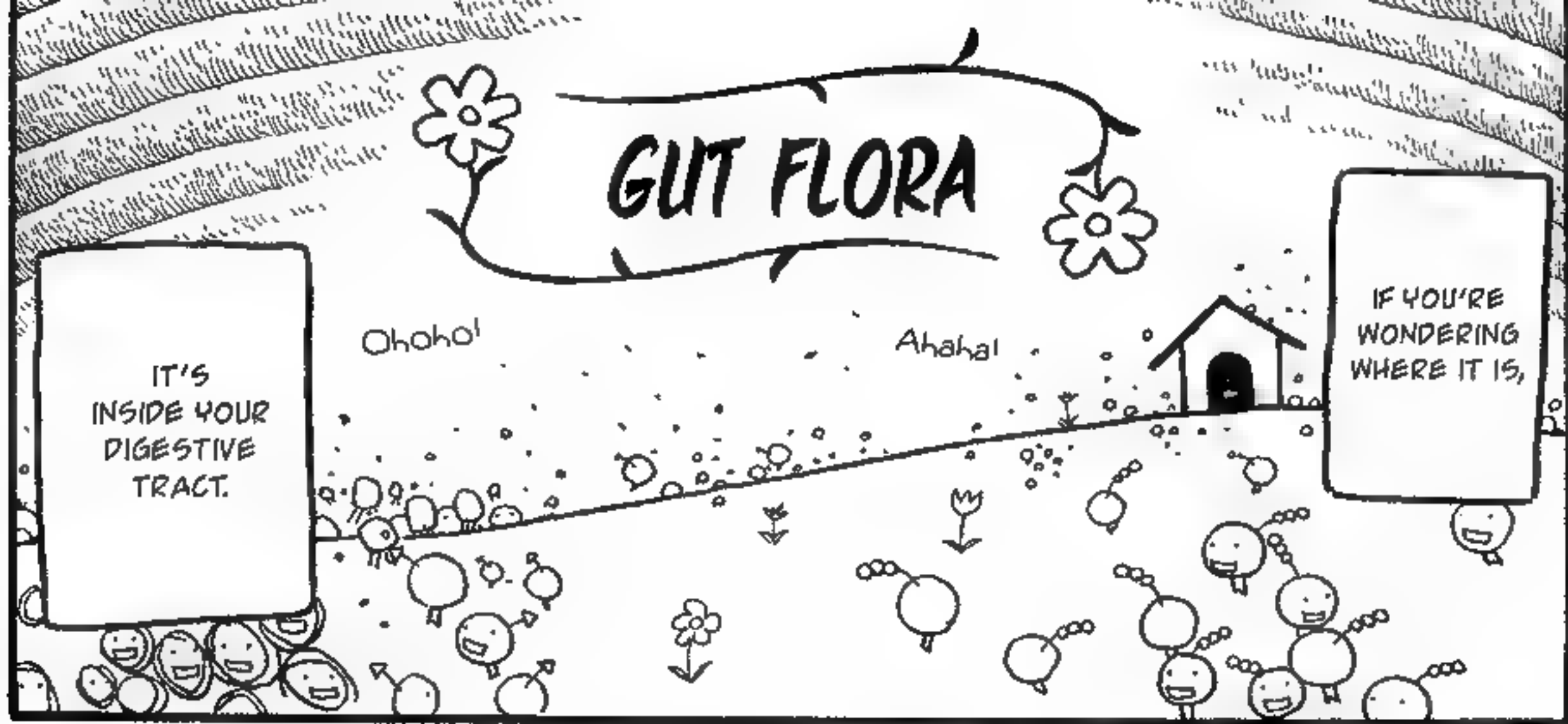
Bonus





EVEN IF WE DESTROY
ALL OTHER MICROBES
IN THE PROCESS, WE
ONLY WANT OUR OWN
SPECIES TO FLOURISH.





GERM CARDS

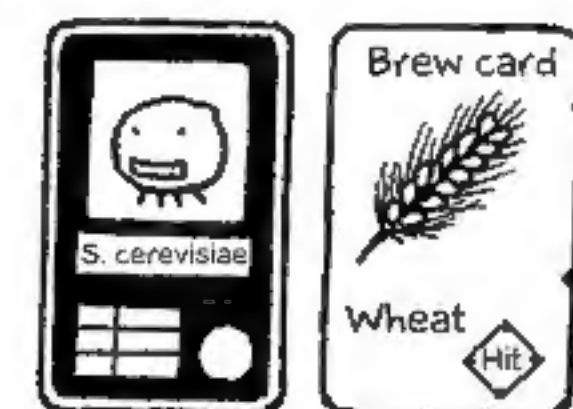
LET'S
COMPLETELY
REPRODUCE
HOW GERMS
FIGHT WITH A
CARD BATTLE!

HAVE
YOU GOT
YOURS
YET!?

AMONG
THEM, WE'LL
INTRODUCE
YOU TO
S. CEREVISIAE
TODAY!



THERE ARE
VARIOUS
CARD TYPES
AND THERE
ENDLESS
WAYS TO
FIGHT!



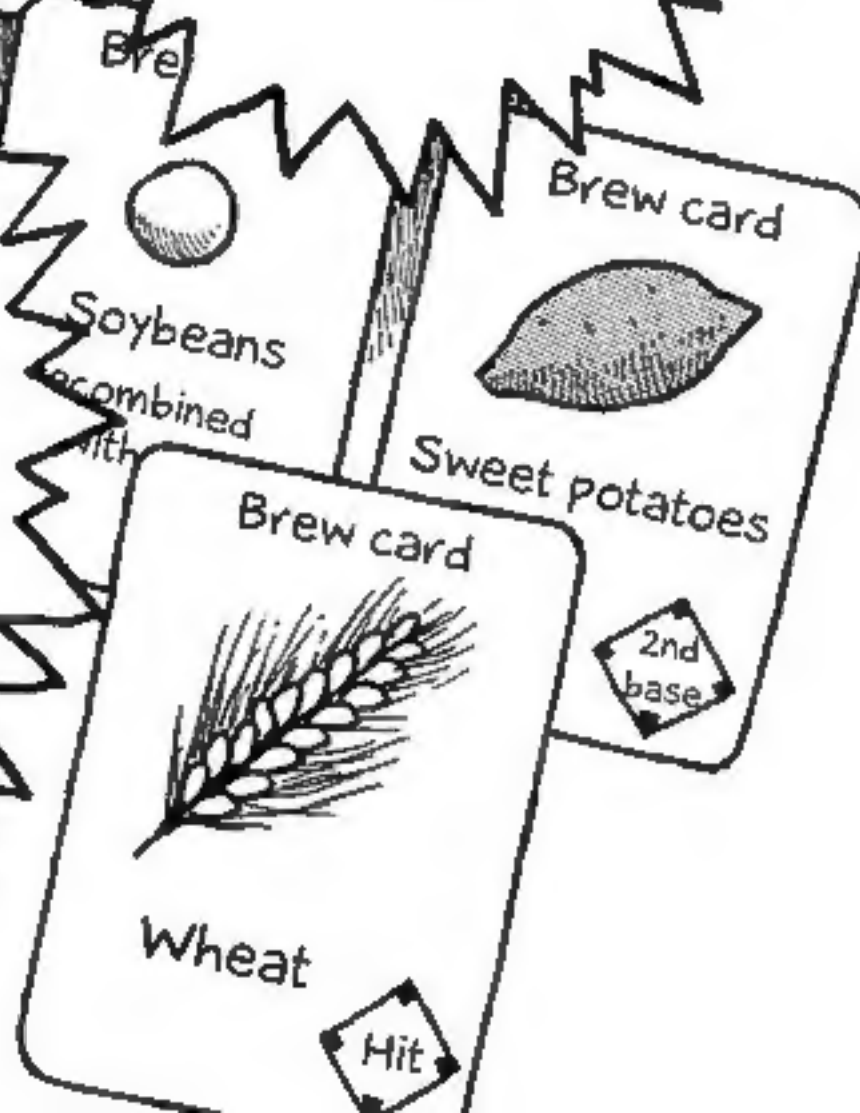
MILK IS AN
EFFECTIVE
COUNTER-
MEASURE
TO THAT,

BUT THE TIMING
FOR USING
MILK IS A
DOUBLE-EDGED
SWORD, SO
YOU HAVE TO
BE CAREFUL!



S. CEREVISIAE
IS YEAST,
SO IT'S GOOD
FOR MAKING
ALCOHOL!

FOR EXAMPLE,
IF YOU PAIR
IT WITH THE
BREW CARD
"WHEAT", YOU
CAN FIGHT AS
"SHOCHU"!

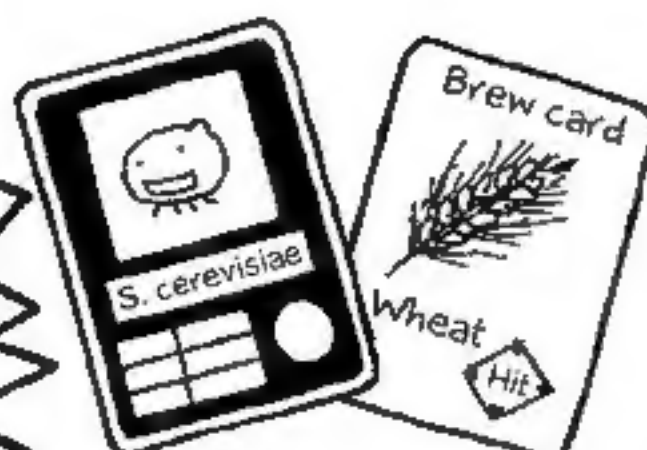


IT STICKS TO THE STOMACH LINING, SO IT'LL BE HARD TO GET DRUNK!



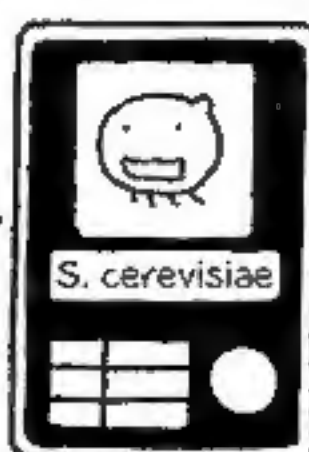
IF YOU USE MILK BEFORE YOUR OPPONENT HAS A CHANCE TO USE SHOCHU,

THEY'LL GO TO BED AND FALL ASLEEP IN NO TIME!



EVEN IF THEY USE SHOCHU FIRST, JUST CALMLY USE MILK ANYWAY!

THE RATIO OF SHOCHU TO MILK DEPENDS ON YOUR TASTE, BUT IT'S ALSO A BIT OF FUN TO DRINK IT SO YOU CAN TALK ABOUT IT LATER!



Main point

Don't get agitated just by imagining it!

THE PROBLEM IS WHEN YOUR OPPONENT USES SHOCHU WITH MILK!

ADD THE NEW PLATINUM CARD *C. BOTULINUM* TO YOUR DECK AND DEFEAT YOUR OPPONENT WITH YOUR OWN TWISTED LOGIC!



DETERMINE HOW THINGS ARE ULTIMATLEY SETTLED WITH THE ROCK, PAPER, SCISSORS ICONS IN THE BOTTOM RIGHT HAND CORNER!



Volume 2 comes out this Fall!

Moyashimon 2

✂ There's a chance the contents will completely change without prior notice.



Hachimitsu Scans
~sweeter than honey~

hachimitsu-scans.blogspot.com